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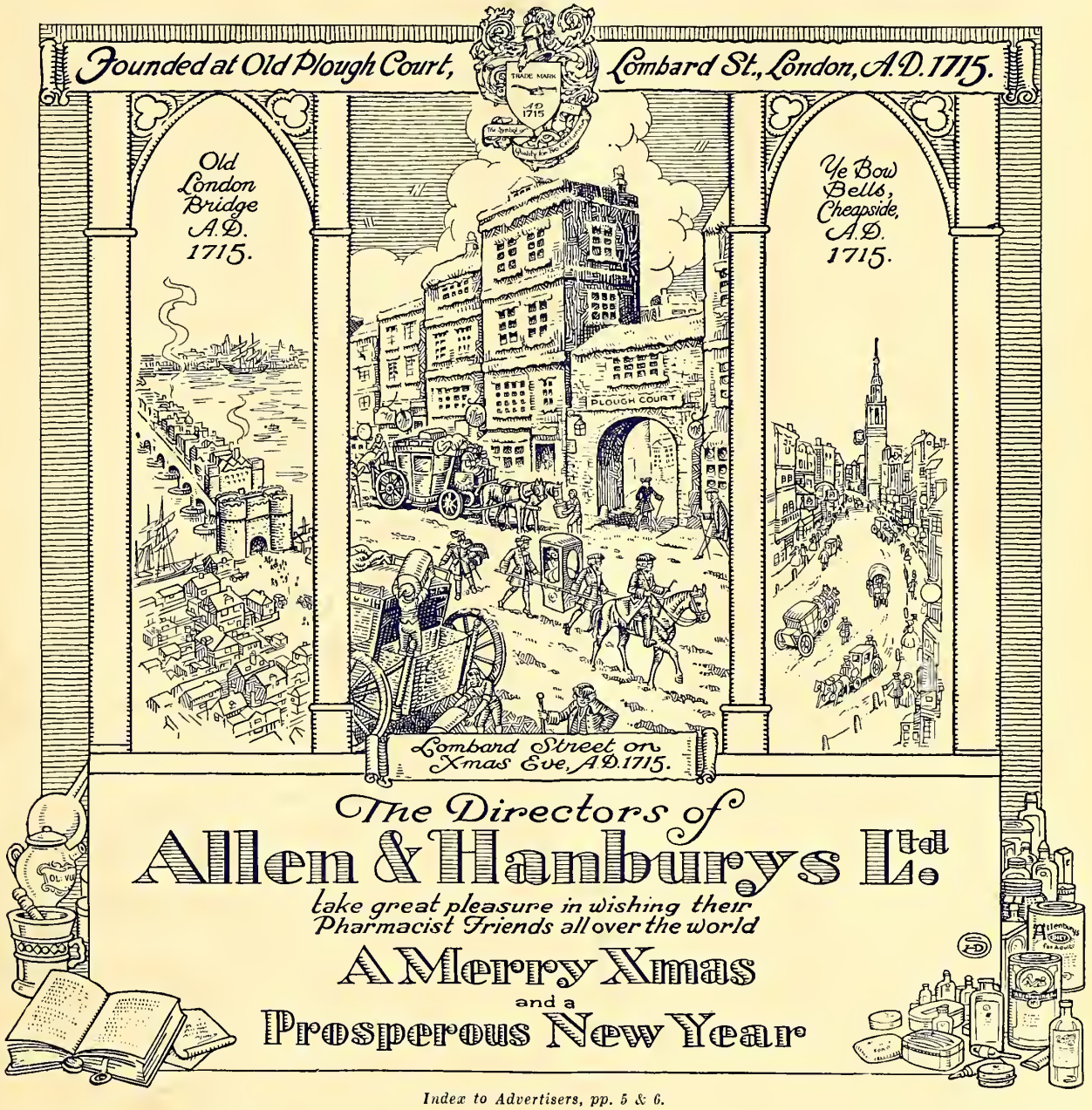
REGISTERED AS A NEWSPAPER

TELEPHONE: CENTRAL 6565
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PUBLISHED WEEKLY AT 28 ESSEX ST., STRAND, LONDON, W.C.2

SUBSCRIPTION (WITH DIARY) 20/- PER ANNUM
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No. 2655. **DECEMBER 27, 1930.** **Vol. CXIII.**



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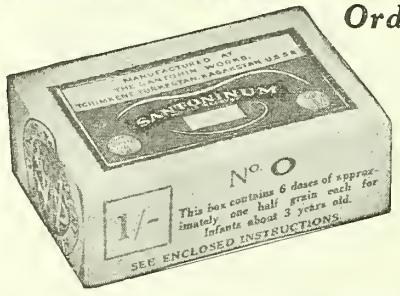
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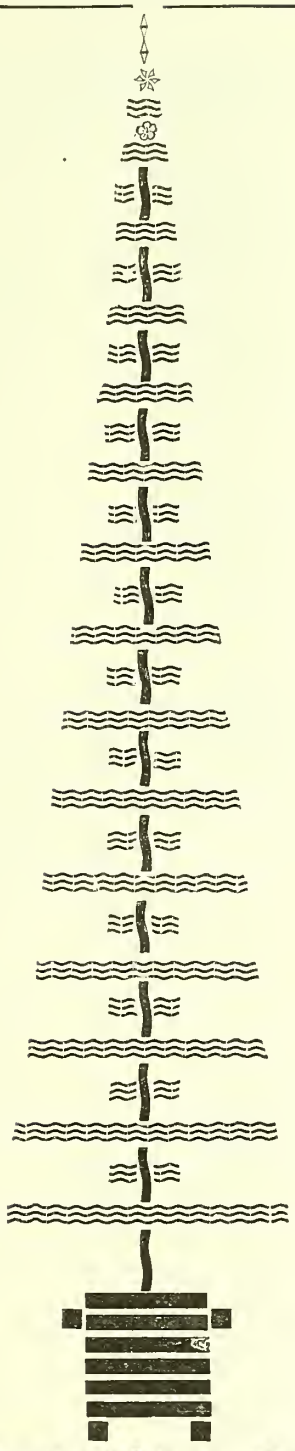
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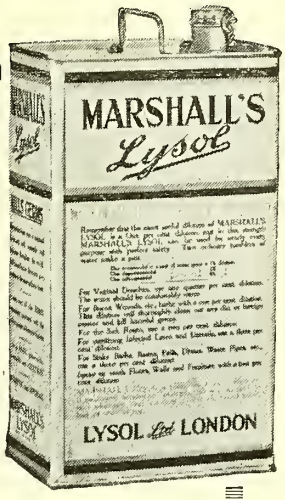


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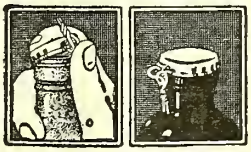


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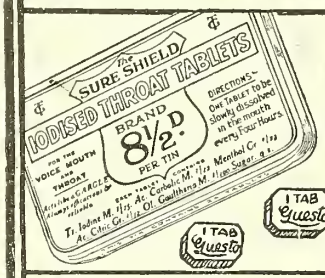
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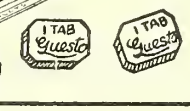
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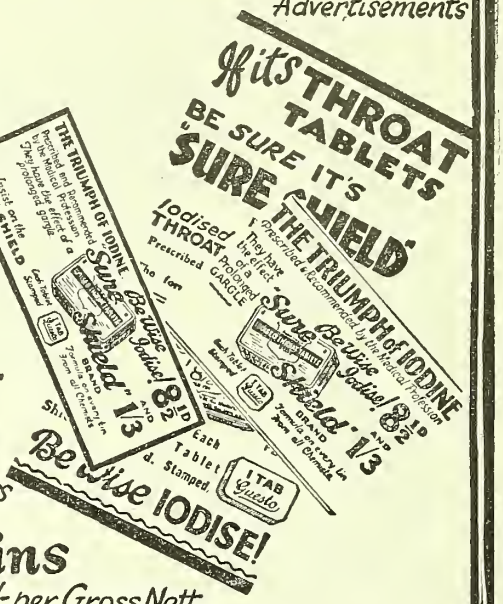
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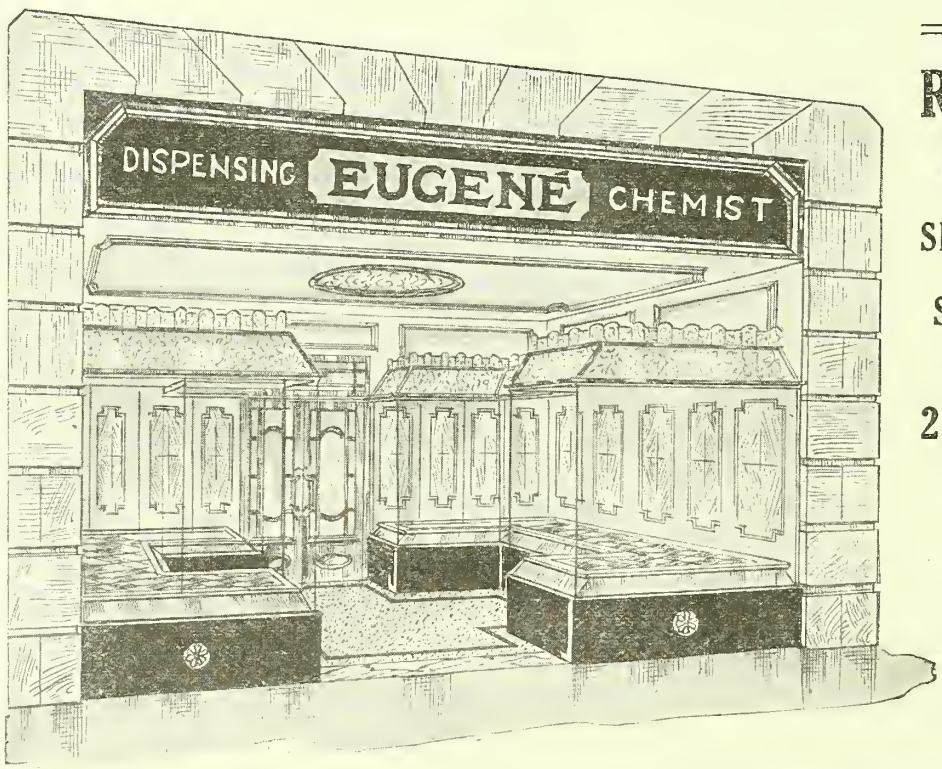
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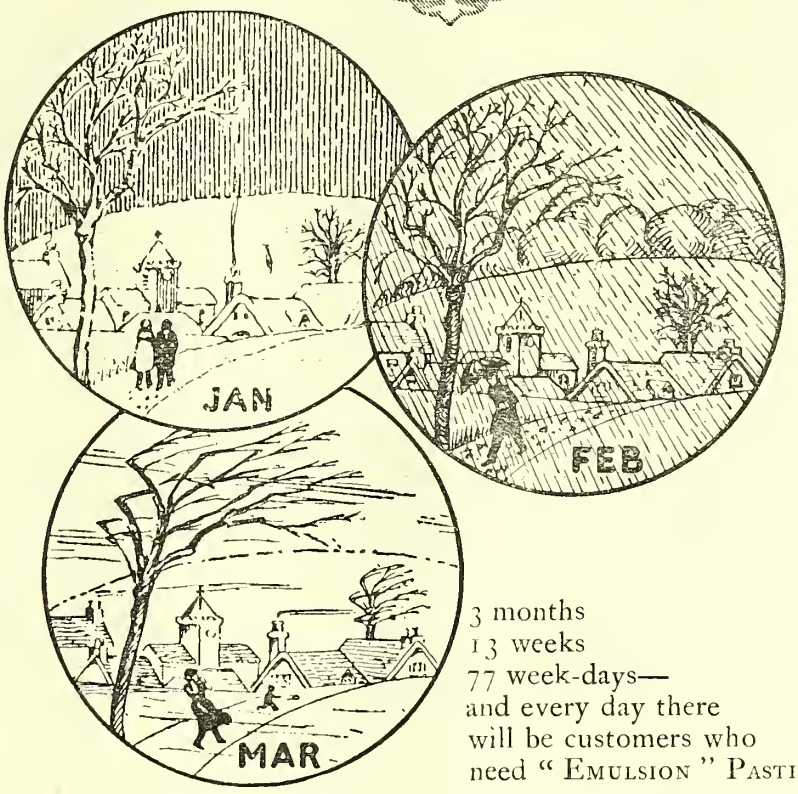


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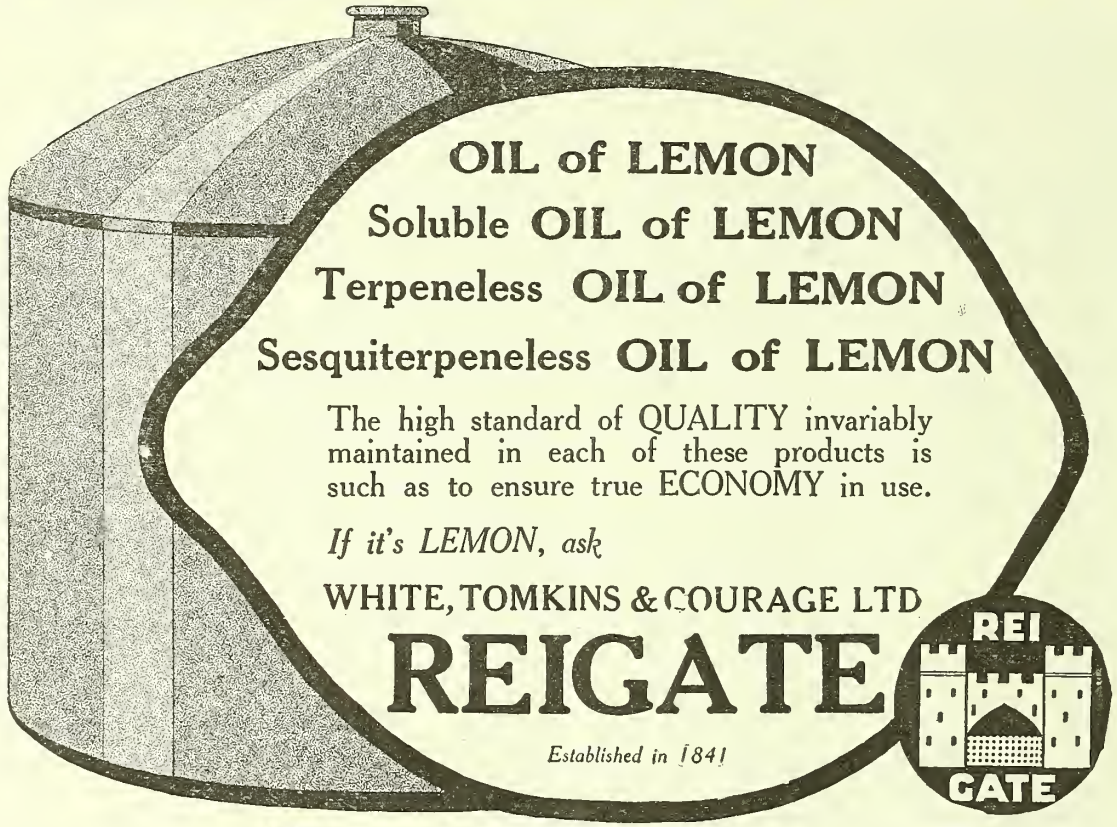
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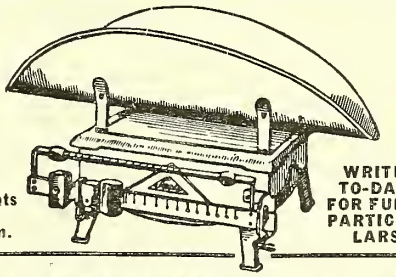
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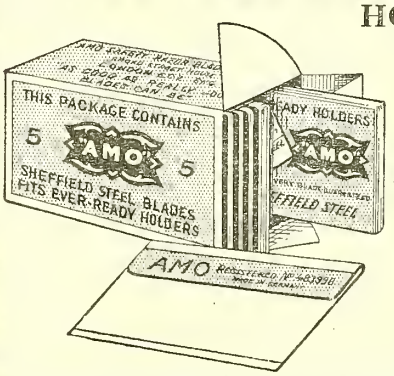
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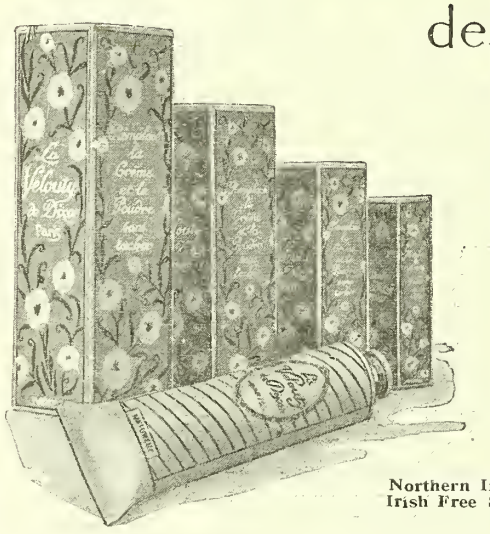
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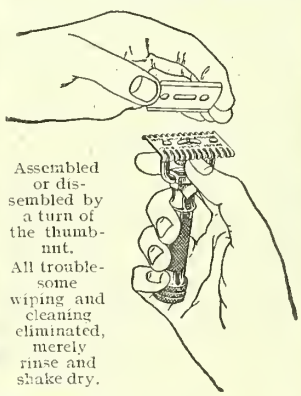
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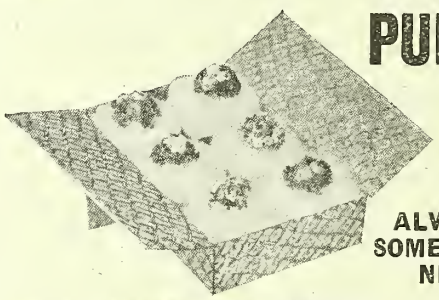
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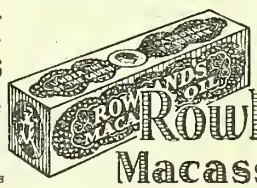
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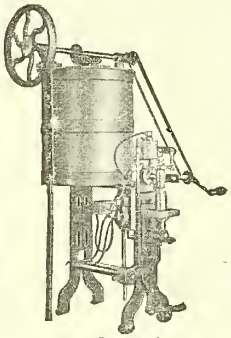
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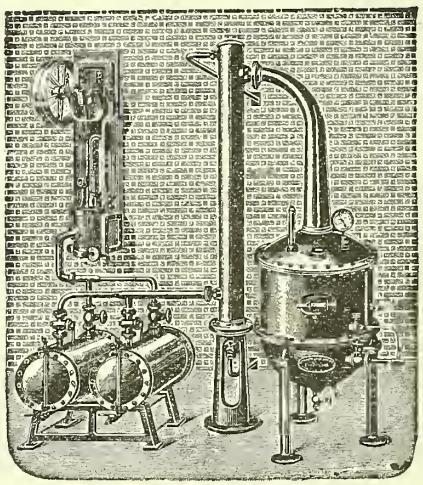
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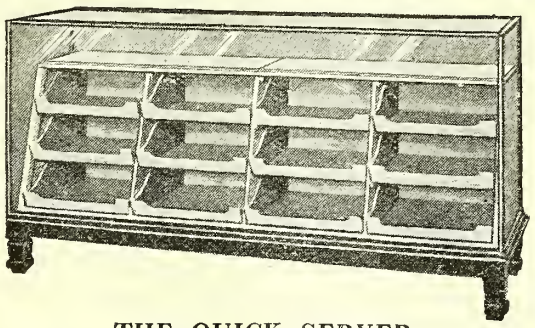
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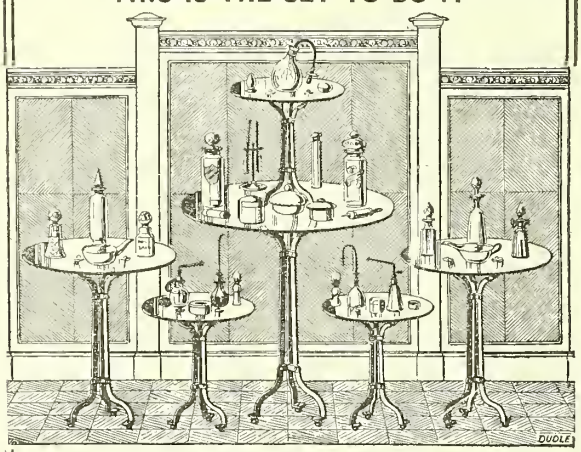
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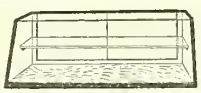
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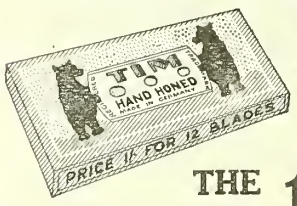
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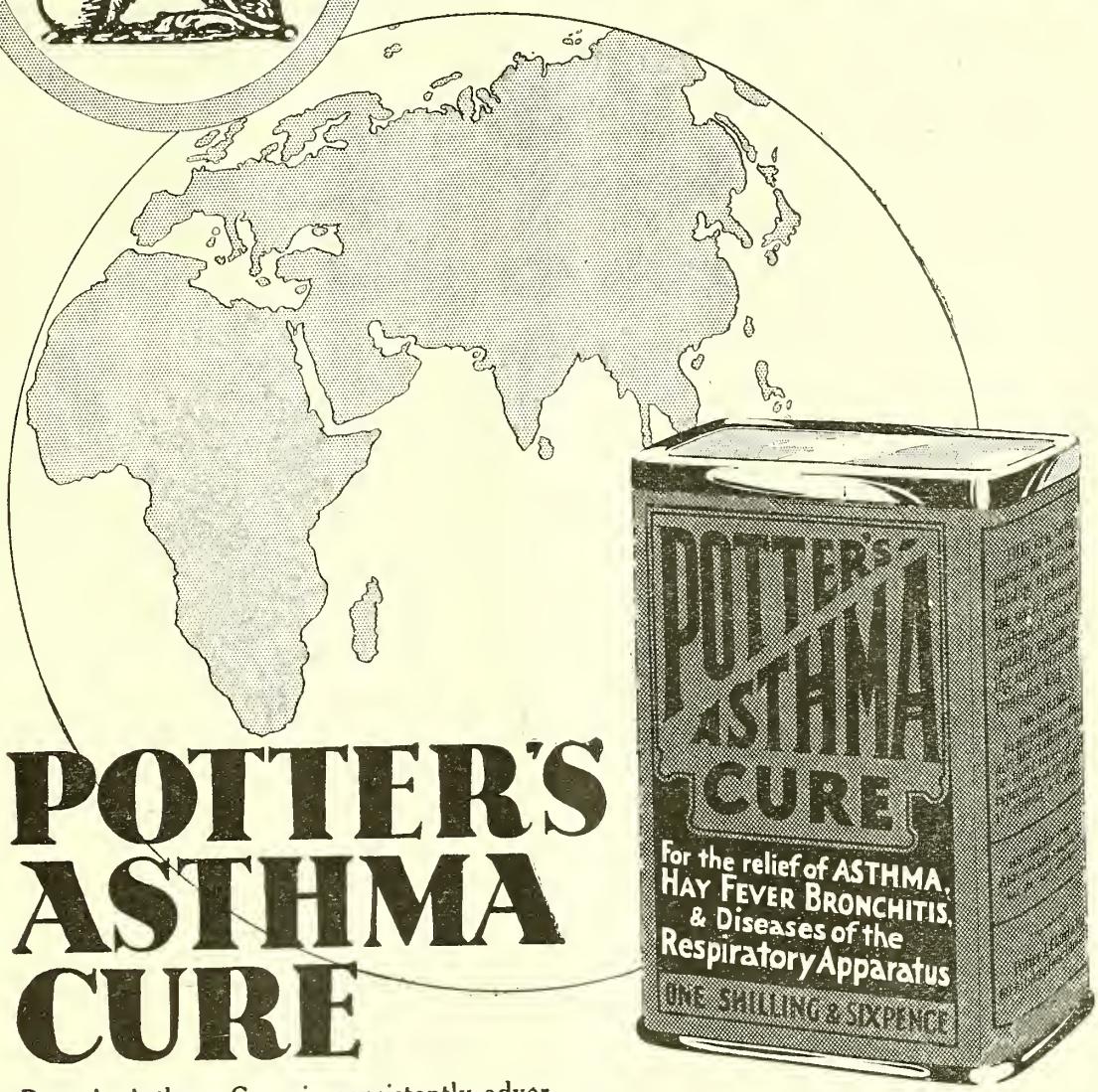
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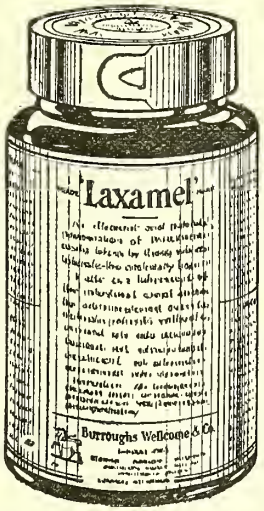
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Branch Offices: 4 Cannon Street, Manchester. (Tel.: City 0052.) 54 Foster's Buildings, High Street, Sheffield. (Tel.: 22458.) 19 Waterloo Street, Glasgow. (Tel.: Central 2329.) 99 Queen Street, Melbourne, Australia.

Vol. 113. No. 26 | December 27, 1930

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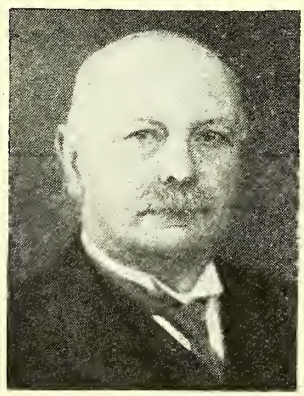
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English and Welsh News

The Editor will be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

Complimentary Dinner and Presentation

In honour of Alderman Jeffrey Poole, chemist and druggist, and Mrs. Poole, a complimentary dinner was given at the Queen's Hotel, Birmingham, on December 17, to mark the election of Mr. Poole to the aldermanic Bench of the City of Birmingham, and to testify to the esteem in which he is held by his brother pharmacists in the city. Mr. E. W. Mann was in the chair, and was supported by about fifty Birmingham pharmacists and their ladies. Mr. F. J. Gibson, J.P. (Wolverhampton), proposed the toast of "Alderman and Mrs. Poole." Mr. Gibson referred to Alderman Poole's long connection with Birmingham pharmacy and his work for the Birmingham Pharmaceutical Association. Mr. Gibson also referred to Alderman Poole's devotion to public work. He concluded by asking Alderman Poole, on behalf of the company, to accept a silver loving cup suitably inscribed, together with a book of vellum bound by hand in tooled leather and containing the signatures of the subscribers. Mrs. E. W. Mann, on behalf of the ladies, asked Mrs. Poole to accept a silver salver as a testimony of their esteem and regard. The toast was rendered with musical honours. Alderman Poole, in acknowledgment, spoke of the great pleasure both he and Mrs. Poole had in the reception and in the presentations. Mrs. Poole also spoke a few words of acknowledgment. During the evening a telegram was read from Mr. A. R. Melhuish (president of the Pharmaceutical Society) expressing sincere congratulations to Alderman and Mrs. Poole and their friends in Birmingham. The evening concluded with a whist drive.



Alderman Jeffrey Poole

Key Industry Duty

The Treasury on December 20 signed an Order re-exempting hydrocyanic acid anhydrous from Key Industry Duty up to June 30, 1931. As the Government have now decided that the period of operation of the Dyestuffs Act is to be extended for one year (January 15, 1931, to January 14, 1932) the information given in our issue of December 13 (p. 737) regarding products liable to Key Industry Duty that are prefixed "D" in the list of dutiable articles is, of course, cancelled.

Miscellaneous

In the courts.—At Rothbury, recently, William Hornsby, saddler, was fined 5s., with 10s. costs, for having sold a disinfectant not sufficiently labelled.

Fire.—An outbreak of fire occurred at the premises of Hedges (Chemists), Ltd., Dale End, Birmingham, on December 20. It was quickly subdued, and there was no dislocation of business.

Sporting events.—Recent matches played by teams representing Potter & Clarke, Ltd., manufacturing chemists, resulted as follows:—*Football*, second round, Buchanan cup, Potter & Clarke, Ltd., v. Suttons, won 7—nil. *Netball, Girls*, London Business Houses league, Potter & Clarke, Ltd., v. Lush & Cook, won 20—16.

British Chemical Plant Exhibition.—An exhibition of British chemical plant, arranged by the British Chemical Plant Manufacturers' Association, will be held at the Central Hall, Westminster, London, S.W.1, on July 13-18, 1931. The chemical engineering group of the Society of Chemical Industry is organising a scientific exhibit in connection with the chemical plant exhibition. Applications for space may be made to the Secretary, British Chemical Plant Manufacturers' Association, 166 Piccadilly, W.1.

Irish News

Pharmaceutical Society of Ireland

The Society's schools will reopen on Monday, January 5. The Registrar will attend from 7.30 p.m. on January 5 and 6 to enrol students.

Brevities

Mr. James J. Mullan, Ph.C., has acquired the Central Pharmacy, Omagh.

Thomas Ward & Sons, Ltd., Wardonia Works, Sheffield, have secured the contract for the equipment of the Irish Free State army with safety razors and blades for the year 1931.

White's Medical Hall, Fermoy, co. Cork, has been purchased from Mr. D. Harnett, L.P.S.I., by Mr. P. Liston, Ph.C., Limerick, in trust for his nephew, Mr. P. Hanley, L.P.S.I., who will conduct the business under the old name.

The official returns show that medicines and medicinal preparations valued at £31,951 were imported into the Irish Free State during October, bringing up the total for the first ten months of the year to £290,877, against £296,315 for the corresponding period of 1929.

The Pharmaceutical Society of Northern Ireland has issued a notice intimating that all apprentices to pharmaceutical chemists must have passed an accepted preliminary examination which entitles to registration as an apprentice, and that they must register as such at the Ministry of Home Affairs.

Belfast

Mr. Horatio Todd, J.P., Ph.C., Belfast, has received many expressions of sympathy on the death of his brother, Mr. Isaac Todd, chief engineer of the s.s. Ardglass.

At Belfast Winter Assizes, on December 16, Edward A. Ashworth and Herbert A. Bamford were charged with false pretences. Mr. Samuel G. Fyffe, Ph.C., Bangor, deposed to giving Ashworth a cheque in April 1929 for £6 10s., for an advertisement, which never appeared. Similar evidence was given by Mr. Robert L. Chambers, Ph.C., Lisburn, and Mr. Samuel H. Forrest, Ph.C., Bangor. The defence was that a third partner in the business had absconded with the money and the contracts could not be kept. Bamford was acquitted. On promising to refund all the money, Ashworth was allowed out on a suspended sentence of six months' imprisonment.

Westminster Wisdom

Notes on Parliamentary Matters.

DYESTUFFS (IMPORT REGULATION) ACT, 1920

The Expiring Laws Continuance Act, 1930, received the Royal Assent on December 19, whereby the Dyestuffs (Import Regulation) Act, 1920, continues in force for another year.

THYROID EXTRACT

Lieut.-Colonel Fremantle (for Mr. Tinne) asked the Home Secretary, on December 19, whether, in view of the increasing use of preparations of thyroid extract and its effects, he will take steps to bring this drug under the Dangerous Drugs Acts.

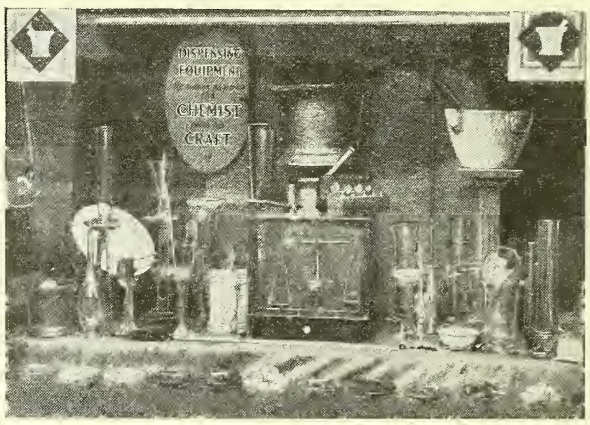
Mr. Clynes: I am advised that thyroid extract is not a drug which would be productive of ill effects similar or analogous to those produced by morphine or cocaine and that consequently it is not a drug to which the Dangerous Drugs Acts can be applied.

THE Royal Institution has received an intimation from the Pilgrim Trust that the trustees have allocated the sum of £16,000 to meet the deficiency on the fund for reconstruction of the Institution.

Chemists' Windows

Photographs sent to the Editor for reproduction should be accompanied by notes as to the arrangement of the displays.

A RECENT issue of "Town and Country News" contained an article entitled "A Famous North-country Chemist," the subject of which was Mr. Alfred D. Purse, chemist and druggist, Salem Street, Sunderland, and his old-established pharmacy. Mr. Purse, who celebrated his eightieth birthday in March last (*C. & D.*, 1930, 1, 324), still supervises the business he founded nearly sixty years ago. In 1898 he commenced mineral-water making, and he does a large business in this branch of the trade. He has been sub-postmaster for the district for over forty years. Mr.



Purse is a past-president of the Sunderland Pharmaceutical Association, and also holds the medal and certificate of the British Red Cross Society and the Order of St. John for services rendered during the great war. The photograph shows his window display in connection with Pharmacy Week.

New Zealand News

PHARMACY WEEK.—This year's Pharmacy Week, recently held throughout the Dominion, was particularly successful in arousing public interest. The high tone of the special window displays attracted great attention, resulting in increased sales. In some cases a scheme of co-operative newspaper advertising was used.

STATUS OF PHARMACY.—During the hearing of a dispute, recently, Mr. Justice Frazer, president of the Arbitration Court, stated that although there was a time when the church, medicine and the law were the only professions to be recognised as such, there was no doubt that pharmacy and dentistry had been added to the list.

THE N.Z. PHARMACEUTICAL ANNUAL CONFERENCE will take place at Rotorua early in March 1931. Should any overseas pharmacists or those interested in pharmacy be in New Zealand at that time the New Zealanders would gladly welcome them to their deliberations. Quite apart from the great benefits that accrue from gatherings as these, Rotorua is the show place of the Dominion, and a wonderful holiday resort. As has been described in a previous issue of the *C. & D.*, it is in the centre of the thermal region and the hub of Maori life. Geysers, boiling pools, boiling mud, blowholes, lakes and beautiful native bush are all adjacent to the town. Transit facilities and accommodation are good. The conference secretary is Mr. M. D. Gray, public accountant, Vulcan Building, Vulcan Lane, Auckland, N.Z., to whom inquiries should be addressed.

Pharmaceutical Society of Northern Ireland

Council Meeting

THE monthly meeting of the Council was held on December 19 in the Society's Offices, Belfast, the president (Mr. S. S. Badger) in the chair. There were present also Messrs. James Dundee (vice-president), Fred Storey, H. Todd, J. C. Culbert, W. J. Hardy, S. Gibson, H. McRoberts, Sir Thomas McMullan, Professor Small, and Dr. S. E. A. Acheson. Apologies for absence were received from Messrs. A. C. McBride, John Maxwell and R. I. Edwards. Mr. D. L. Kirkpatrick (secretary) was in attendance.

A Section 19 Renewal

Mrs. Parks, 9 Bridge Street, Banbridge, was granted authority to carry on for a further period of five years the business of pharmaceutical chemist, as formerly conducted by the late Mr. J. P. Parks, Ph.C.

Poison-Licence Refused

Armagh County Council wrote that they had on reconsideration again declined the application of Mr. R. A. Stewart, Glenanne, for a licence to sell agricultural and horticultural poisons.

The SECRETARY said he had opposed the application on both occasions. The Council expressed satisfaction at the decision.

Intermediate Lists

A letter was read from the Secretary of the Ministry of Home Affairs, acknowledging receipt of the resolution passed by the Pharmaceutical Society of Northern Ireland, and stating that during the first quarter of each year when the Register is being completed and licence fees received, it would be impossible to furnish monthly returns. After that date the number of licences, save in the case of those who pass examinations in June and December, is very small. In the circumstances it would appear, therefore, that a monthly return would, generally speaking, involve an amount of labour out of proportion to its utility, and perhaps the purposes of the Pharmaceutical Society would be adequately served if a return of licensees was furnished, as at the present moment, after the Register is completed, and thereafter quarterly.

Mr. HARDY said it was absolutely imperative they should have the information.

Mr. DUNDEE said he had asked for the information and had been refused.

It was stated that possibly the Ministry of Labour wanted the information, but Mr. STOREY said if they did they should apply to the Ministry of Home Affairs.

Mr. HARDY said the Central Pharmaceutical Committee wanted the list.

No Authority

The Law Committee reported that they could not recommend the Council to grant the application of Dr. Magill, L.A.H., to be placed on the Register, legal opinion being that they had no authority to do so. The report of the Committee was adopted on the motion of Mr. DUNDEE, seconded by Mr. TODD.

Belfast Technical College

A letter was read from Alderman W. H. Alexander, chairman of the Technical Instruction Subcommittee of Belfast Corporation, and Mr. J. Earls, Principal of the Municipal College of Technology, concerning the interview between the deputation of the Council of the Society and the Technical Instruction Subcommittee on November 27. The letter stated:—

"That closer contact is necessary between the Council and the College authorities is shown by the opinions freely expressed by the members of the deputation as to the inadequacy of the accommodation available in the College. These opinions were a surprise to the members of the Subcommittee, and were obviously due to a misapprehension of the actual facts. That such opinions should be held by a body so influential as the Pharmaceutical Council is a matter which the Subcommittee can only deplore, and they feel that if the Council would supply them with particulars of the accommodation required, and thus give them an opportunity of saying whether or not the necessary accommodation could be provided, the main cause for the misunderstandings which have arisen would be removed."

It was agreed to defer discussion on the matter until the report of the deputation was in the hands of the members.

December Examinations

The results of the December examinations having been submitted, reports were read from the examiners.

The Examiner in Pharmacy and Practical Pharmacy reported that while there were no candidates of outstanding ability, those who were successful received a reasonable average.

The Examiner in Pharmacognosy reported that the answers to the questions, both in theory and practice, were on the whole rather mediocre.

The Examiner in Botany said that some of the answers to the paper set on botany had not been satisfactory. An attempt was made in setting the paper on theoretical botany to test whether the candidates were covering the syllabus as given in the Regulations. The answers in the practical examination proved that the candidates in general were wrong in their ideas concerning the essential anatomical differences between stems and roots, an elementary point upon which the teaching should be quite clear.

The report of the Examiner in Physics said no comment could be made on the general standard of the candidates, as so many had already been referred, and would be presumably below the average in ability.

The various reports were referred to the Education Committee.

Veterans

Mr. STOREY mentioned that on December 22 two members of the Council would be forty years qualified as chemists and druggists. He referred to Mr. Samuel Gibson, J.P., and Dr. Acheson. Others who would also attain to the forty years on the same day were Messrs. W. J. Gibson, William Shaw, Jacob Walsh and Isaac Davison.

Members Elected

The following nominated candidates were elected as members of the Society:—

Charles Edward Byrne, The Medical Hall, Dromore; Robert Gray, 41 Ogle Street, Armagh; Thomas Lavery, 55 Mountpottinger Road, Belfast; John Sanderson, 15-16 Bridge Street, Ballymena; Robert Alexander McGrath, 13 Woodvale Road, Belfast; Frederick Robson, 4 Castle Street, Newtownards; and Lavinia Mary Forrest, 155 Belmont Road, Belfast.

Accounts were passed and the Council rose, the PRESIDENT wishing the members a happy Christmas and prosperous New Year.

NEW YEAR FUNCTION.—Tickets are obtainable from the secretaries for the New Year carnival dance of the North London Pharmaceutical Association to be held at the "Gate House," Highgate, N., on January 1; single, 3s.; double, 5s. 6d. Dancing from 7.30 p.m. to 11.45 p.m.

LEICESTER COLLEGES MAGAZINE.—The December issue of "The Prism," official organ of the Students' Association, Colleges of Art and Technology, Leicester, is a publication of considerable merit. Pharmacy is represented by a number of excellent articles and an amusing "Ode to the Full-Time Pharmacists"

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PHARMACY

Elixir Ephedrinæ. — The following formula for elixir of ephedrine, elaborated by Herbert Skinner, Ph.C., is in use in the Royal Northern Hospital:—

Ephedrin. hydrochlor.	gr. viij.
Menthol	gr. j.
Alcohol (90 per cent.)	ʒij.
Glycerin.	ʒiij.
Syr. aurant.	ʒij.
Aq. destillat.	ad ʒiv.

If desired quite clear it may be clarified with calcium phosphate.

Aromatic Elixir of Gluside.—C. M. Snow and B. Fantus ("Journal of the American Pharmaceutical Association," XIX, 9, 1007) suggest the following formula for aromatic elixir of gluside intended as a suitable flavouring agent for cases of diabetes mellitus:—

Compound spirit of orange ...	0.5 c.c.
Gluside	0.2 gm.
Glycerin	20.0 c.c.
Alcohol	25.0 c.c.
Water, a sufficient quantity to make	...100.0 c.c.
Purified talc	2.0 gm.

The elixir is miscible with water and alcohol in all proportions, and is suggested (one part with four parts of water) as a good vehicle for sodium or potassium bromide.

Balsam of Peru as a Dressing.—Professor Hérissey, writing to the Commission dealing with the new edition of the "Formulaire des Pharmaciens Français," suggests an unctuous dressing of balsam of Peru. The medicament is applied on undressed muslin, the size of the mesh being left to the discretion of the prescriber. For general purposes, however, Professor Hérissey recommends a mesh of sixteen to each square centimetre. The muslin, cut to the desired size, is arranged in twenty layers, each layer separated by a sheet of ordinary white wrapping paper; the whole is then covered by a final sheet of paper and placed in a tin box of sufficient size to allow of a small margin between the contents and sides. The medicated mass is prepared by introducing into a vessel of 3,000 c.c. capacity the following:—

Balsam of Peru	15 c.c.
Olive oil (or almond or poppy oil)	150 gm.
Liquefied white vaseline ...	... 1,500 gm.

The vessel is placed on a water bath and the contents digested for from fifteen to thirty minutes. After standing aside for some minutes the clear liquid is decanted from the undissolved residue of the balsam of Peru. This liquid is poured into the box containing the muslin, etc. 150 gm. of medicament is suggested as a suitable quantity for a box having a surface area of 100 square cm. The box is then closed and sterilised for half an hour in an autoclave.

New Paste Bandage.—C. J. Cellan-Jones and Katherine M. Cellan-Jones give details ("British Medical Journal," 3639, 560) of the preparation and use of a bandage devised by them in consequence of drawbacks experienced in using bandages impregnated with various pastes made on a glyco-gelatin basis. The authors' paste contains the following substances in parts by weight: Zinc oxide, 10; glycerin, 10; sterilised refined glue, 4; gum acacia, 5; water, 30. A bandage of requisite length and width is wound on one roller of a machine and carried through a basin, under a series of crossbars, to a second roller, where it is rewound after being thoroughly soaked in the warm paste. The bandages are wrapped in greaseproof paper, and are stored in airtight tins. They never solidify in the same way as would the ordinary zinc-gelatin, but remain soft, very sticky, and quite pliable, even when kept for months. No preparation is required before they are applied in the same fashion as ordinary cotton bandages. Within a few hours of application the warmth of the limb dries the moisture from the bandage, the twists of which then become closely adherent to one another and moulded to the leg, thus producing a firm though elastic support, which will remain efficient for three weeks or a month if desired. The whole procedure must be carried out twice weekly at first, but longer periods are very soon allowable between the dressings. The paste bandage interferes in no way with the injection treatment of veins; in fact, it provides relief if a smart reaction, accompanied by swelling and tenderness, follows the injection of the various sclerosing media. In the dry and irritating forms of varicose eczema the authors have found that the best results follow when the bandage is applied over strips of lint spread with an ointment containing 2 parts of crude coal tar, 4 parts of zinc oxide, and 16 parts of vaseline.

Masking the Taste of Strychnine.—J. C. Ward and J. C. Munch ("Journal of the American Pharmaceutical Association," XIX, 10, 1057) have determined the threshold for detection of the bitter taste of strychnine. The minimum quantity detectable in various solvents is given in the following table:—

THRESHOLD TASTE VALUES FOR STRYCHNINE

Solvent	Micrograms of alkaloid			
	Concentration per cent.	Alkaloid	Strychnine in form of sulphate	Hydrochloride
Distilled water ...	—	5.6	5.4	5.8
City water ...	—	6.1	6.4	6.3
Sodium bicarbonate	0.000,053	5.3	—	—
Alum	0.000,63	6.3	—	—
Borax	0.000,69	6.9	—	—
Sodium chloride ...	0.6	7.1	7.0	8.5
Sodium chloride ...	0.9	7.2	7.2	9.5
Saccharin	0.000,019	7.5	—	—
Sucrose	1.0	8.9	7.2	7.2
Sucrose	5.0	11.1	8.5	9.5
Sucrose	10.0	17.5	14.8	14.3
Yerba santa ...	1.0	16.7	—	—
Yerba santa ...	5.0	36.4	—	—

Yerba santa had the greatest masking effect, while sodium bicarbonate increased the bitterness. The kation is the significant factor in masking action of salts, the anion being without effect. Taste buds for locating bitterness are located at the tip as well as the root and sides of the tongue; individuals varied whether bitterness was first detected at the tip or at

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other parts of the tongue or soft palate. There was an interval ranging from twelve to twenty-eight seconds between application of strychnine solution and first detection of bitterness.

Australian and New Zealand Formulas.—The following formulas are included in the fifth edition of the Australian and New Zealand Pharmaceutical Formulary (A.P.F.), published by the Australasian Pharmaceutical Conference on behalf of the Pharmaceutical Societies of Australia and New Zealand:—

CALAMINA PREPARATA.—PREPARED CALAMINE.—

Ferric oxide	120 gr.
Zinc oxide	8 oz.
Zinc carbonate	to 16 oz.

Moisten the ferric oxide with a little water and triturate with the other ingredients. Finally sift and remix.

Note.—A substitute for natural calamine, which is no longer a commercial article. The amount of ferric oxide may be varied according to the tint required.

COLLODIUM STYPTICUM.—STYPTIC COLLODION.—

Tannic acid	3 oz.
Tincture of benzoin	3 fl. oz.
Collodion	to 20 fl. oz.

COLLUTORIUM ALKALINUM — ALKALINE MOUTH WASH.—

Purified borax	5 gr.
Sodium bicarbonate	5 gr.
Liquefied phenol	1 minim
Distilled water	to 1 fl. oz.

COLLUTORIUM ASTRINGENS. — ASTRINGENT MOUTH WASH.—

Tincture of eucalyptus kino	30 minims
Weak tincture of iodine	30 minims
Potassium chlorate	10 gr.
Rose water	to 1 fl. oz.

COLLUTORIUM FORMALDEHYDI COMPOSITUM.—COMPOUND FORMALDEHYDE MOUTH WASH.—

Solution of formaldehyde	8 minims
Tincture of cochineal	5 minims
Methyl salicylate	1 minim
Glycerin	20 minims
Peppermint water	to 1 fl. oz.

COLLUTORIUM MYRRHÆ ET BORACIS.—MYRRH AND BORAX MOUTH WASH.—

Purified borax	8 gr.
Tincture of myrrh	10 minims
Glycerin	1 fl. drachm
Distilled water	to 1 fl. oz.

CONFECTIO PARAFFINI.—CONFECTION OF PARAFFIN.—

Alkanna root	4 gr.
Citric acid	40 gr.
Oil of lemon	16 minims
Soft paraffin, white	5 oz.
Refined sugar, in powder	to 8 oz.

Digest the alkanna root with the melted soft paraffin on a water bath for 30 minutes, strain on to the citric acid and the refined sugar, previously powdered and mixed in a mortar. When cold add the oil of lemon.

CREMOR CALAMINÆ LIQUIDUS.—LIQUID CALAMINE CREAM; CALAMINE LINIMENT.—

Prepared calamine	80 gr.
Zinc oxide	80 gr.
Phenol	15 gr.
Olive oil	2 fl. oz.
Solution of lime	to 4 fl. oz.

Triturate the powders in a mortar with the olive oil in which the phenol has been dissolved, lastly add the solution of lime.

CREMOR HAMAMELIDIS.—HAMAMELIS CREAM.—

Stearic acid	175 gr.
Oleic acid	70 gr.
Solution of potash	380 minims
Solution of hamamelis	2 fl. oz.
Glycerin	90 gr.
Synthetic oil of rose	4 minims
Distilled water	to 4 oz.

Heat the stearic and oleic acids to 80° C. Add, with constant stirring, the solution of potash and the solution of hamamelis, both heated to 80° C., add the glycerin and the distilled water. Stir until cold. Lastly, add the oil.

CREMOR POTASSÆ SULPHURATÆ COMPOSITUS.—COMPOUND SULPHURATED POTASH CREAM; MARCUSSEN AND EHLERS' CREAM.—

Sublimed sulphur	320 gr.
Potassium hydroxide	160 gr.
Soft paraffin, yellow	400 gr.
Wool fat	400 gr.
Zinc sulphate	50 gr.
Sodium hydroxide	15 gr.
Distilled water	a sufficient quantity
Oil of bitter almonds	10 minims
Liquid paraffin, by weight	to 4 oz.

Add to the potassium hydroxide its own weight of distilled water; while the solution is still warm add half the sublimed sulphur and heat gently on a water bath until the sulphur dissolves. Mix the solution with the soft paraffin and wool fat previously melted together. Triturate this with the product obtained by mixing the zinc sulphate, dissolved in half its own weight of warm water, with the sodium hydroxide dissolved in five times its weight of water, and with the rest of the sulphur. Add the liquid paraffin and the oil.

ELIXIR QUININÆ ET CINNAMOMI.—ELIXIR OF QUININE AND CINNAMON.—

Quinine sulphate	16 gr.
Ammoniated tincture of quinine	880 minims
Oil of cinnamon	32 minims
Spirit of chloroform	320 minims
Tincture of orange	1 fl. oz.
Syrup	to 4 fl. oz.

Dissolve the quinine sulphate in the ammoniated tincture of quinine, then add the other ingredients in the order cited above.

EMULSIO PARAFFINI.—EMULSION OF PARAFFIN.—

Liquid paraffin	1½ fl. oz.
Gum acacia, in powder	160 gr.
Gelatin	12 gr.
Compound spirit of almonds	20 minims
Solution of gluside	20 minims
Distilled water	to 4 fl. oz.

Dissolve the gelatin in the distilled water. Mix the liquid paraffin with the gum acacia in a mortar, add in one portion five fluid drachms of the gelatin solution. Triturate until emulsification is complete, dilute gradually with the gelatin solution, and then add the rest of the ingredients.

EMULSIO PARAFFINI CUM PHENOLPHTHALEINO.—EMULSION OF PARAFFIN WITH PHENOLPHTHALEIN; EMULSIO P.P.P.—

Liquid paraffin	1½ fl. oz.
Gum acacia, in powder	160 gr.
Phenolphthalein	4 gr.
Gelatin	12 gr.
Solution of gluside	20 minims
Compound spirit of cinnamon	20 minims
Distilled water	to 4 fl. oz.

Dissolve the gelatin in the distilled water. Mix the liquid paraffin with the gum acacia and the phenolphthalein in a mortar, add in one portion five fluid drachms of the gelatin solution. Triturate until emulsification is complete, dilute gradually with the gelatin solution and then add the rest of the ingredients.

INFUSUM GENTIANÆ COMPOSITUM CONCENTRATUM, 1 TO 7.—CONCENTRATED COMPOUND INFUSION OF GENTIAN.—

Gentian root, thinly sliced	2 oz.
Dried bitter orange peel, cut small	2 oz.
Lemon peel, cut small	4 oz.
Alcohol (70 per cent.)	6 fl. oz.
Distilled water	to 20 fl. oz.

Macerate the lemon peel, thin and cut small, with the alcohol for twenty-four hours. Strain and wash the marc with sufficient water to produce twelve fluid

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ounces. Add this liquid to the gentian root, macerate for twenty-four hours. At the same time macerate the orange peel with twelve fluid ounces of distilled water for twenty-four hours. Strain off the liquids, mix. Wash both marcs in succession with sufficient distilled water to produce twenty fluid ounces. Filter.

LINCTUS BROMOFORMI.—BROMOFORM LINCTUS.—

Bromoform	16 minims
Alcohol (90 per cent.)	2 fl. dr.
Compound tincture of cardamoms	2 fl. dr.
Glycerin ... ... to	2 fl. oz.

Dissolve, using a dry measure. Dispense in a dry bottle.

Prescribing Note.—This linctus is much more pungent than the emulsion of bromoform of the same strength. Its pungency is lessened by ordering it with an equal quantity of glycerin. The linctus should be clear and the patient may be warned of the danger if it become turbid.

LINCTUS CODEINÆ.—CODEINE LINCTUS.—

Codeine phosphate	$\frac{1}{8}$ gr.
Syrup of citric acid	30 minims
Spirit of chloroform	5 minims
Syrup of wild cherry ... to	1 fl. dr.

LINIMENTUM ACONITI COMPOSITUM. — COMPOUND ACONITE LINIMENT; A.B.C. LINIMENT (MISCIBLE).—

Liniment of aconite	1 fl. oz.
Liniment of belladonna	1 fl. oz.
Camphor	40 gr.
Chloroform	$\frac{1}{2}$ fl. oz.
Oleic acid ... ... to	3 fl. oz.

Dissolve the camphor in the chloroform and add the other ingredients.

LINIMENTUM CAPSICI.—CAPSICUM LINIMENT.—

Capsicum	2 oz.
Oleic acid	2 fl. oz.
Oil of eucalyptus	192 minims
Alcohol (90 per cent.) ... to	20 fl. oz.

Macerate the bruised capsicum in 18 fluid ounces of alcohol for seven days. Filter and dissolve the oleic acid and oil of eucalyptus in the filtrate, washing the marc with sufficient alcohol to produce the required volume.

LIQUOR CRESOL COMPOSITUS.—COMPOUND SOLUTION OF CRESOL; LYSOL.—

Cresol	10 fl. oz.
Cottonseed oil, by weight	7 oz.
Sodium hydroxide, flakes	472 gr.
Distilled water ... ... to	20 fl. oz.

Mix the cresol with the cottonseed oil and heat to 80° C. Dissolve the sodium hydroxide in 11 fluid drachms of distilled water. Mix the two solutions and heat the mixture until one volume forms a clear liquid with ten volumes of distilled water. Cool and add sufficient distilled water to produce the required volume. This may also be made by neutralising 20 volumes of oleic acid with solution of sodium hydroxide (1 in 8), adding 50 volumes of cresol and sufficient distilled water to produce 100 volumes.

LIQUOR FERRI PHOSPHATIS.—SOLUTION OF FERROUS PHOSPHATE.—

Iron, in wire	150 gr.
Concentrated phosphoric acid ...	18 fl. dr.
Distilled water ... ... to	4 fl. oz.

Dissolve the iron by the aid of gentle heat in the concentrated phosphoric acid diluted with half its volume of distilled water. Filter and wash the flask and the filter with sufficient distilled water to produce the required volume. This solution may be used for the preparation of Syrupus Ferri Phosphatis.

LIQUOR LIMONIS.—SOLUTION OF LEMON.—

Lemon peel, cut small	5 oz.
Alcohol (70 per cent.)	10 fl. oz.
Syrup	7 fl. oz.
Distilled water ... ... to	20 fl. oz.

Macerate the lemon peel with the alcohol for 48 hours. Strain off the liquid, to the marc add 7 fluid ounces of syrup, allow to stand one hour, decant. Wash the marc with sufficient distilled water to make up the volume.

Uses.—When diluted with 7 volumes of syrup this yields a preparation which may be prescribed instead of the official syrup of lemon when the acidity of the latter is objectionable.

LIQUOR THYMOL COMPOSITUS.—COMPOUND SOLUTION OF THYMOL; LIQUOR ANTISEPTICUS; ANTISEPTIC SOLUTION.—

Menthol	60 gr.
Thymol	120 gr.
Benzoic acid	350 gr.
Methyl salicylate	20 minims
Eucalyptol	30 minims
Purified borax	1 oz.
Boric acid	1 oz.
Tincture of senega	5 fl. oz.
Glycerin	2 fl. oz.
Alcohol (90 per cent.)	18 fl. oz.
Distilled water ... ... to	100 fl. oz.

Dissolve the menthol, thymol, benzoic acid, methyl salicylate and eucalyptol in the alcoholic liquids and the borax and boric acid in 70 fluid ounces of water and the glycerin. Mix the solutions and add sufficient water to make the required volume. Allow to stand for 24 hours, add a little powdered talc, shake and filter.

LIQUOR TOLUTANUS.—SOLUTION OF TOLU.—

Balsam of tolu	$2\frac{1}{2}$ oz.
Alcohol (90 per cent.)	5 fl. oz.
Kaolin	1 oz.
Distilled water ... ... to	20 fl. oz.

Dissolve the balsam of tolu in the alcohol, add the kaolin and pour the mixture gradually, with frequent shaking, into 14 fl. ounces of distilled water previously heated to 70° C. Allow to stand for 24 hours and filter, washing the filter with sufficient distilled water to produce the required volume.

Note.—When diluted with seven times its volume of Syrupus B.P. it yields a preparation corresponding to Syrupus Tolutanus B.P., but slightly weaker in sugar.

LOTIO ACRIFLAVINI.—ACRIFLAVIN LOTION.—

Acriflavin	9 gr.
Sodium chloride	80 gr.
Distilled water ... ... to	20 fl. oz.

LOTIO BENZOINI COMPOSITA. — COMPOUND BENZOIN LOTION.—

Stearic acid	$\frac{1}{2}$ oz.
White beeswax	45 gr.
Alcohol (90 per cent.)	1 fl. dr.
Potassium carbonate	36 gr.
Purified borax	24 gr.
Glycerin	2 fl. dr.
Tincture of benzoin	24 minims
Oil of bitter almonds	4 minims
Oil of bergamot	4 minims
Quince seeds	175 gr.
Sodium benzoate	36 gr.
Distilled water ... ... to	20 fl. oz.

Melt the stearic acid and white beeswax on a water-bath, heat to 60° C., and add the alcohol. Add this gradually to the purified borax, potassium carbonate and glycerin, previously mixed with $\frac{1}{2}$ fluid ounce of distilled water, and also heated to 60° C., stirring after each addition and completing the reaction by heating the product for a few minutes on the water bath. Then add the liquid obtained by macerating the quince seeds and the sodium benzoate in the remainder of the distilled water for 24 hours. Lastly, add the oils dissolved in the tincture of benzoin.

LOTIO CALAMINÆ.—CALAMINE LOTION.—

Prepared calamine	120 gr.
Zinc oxide	120 gr.
Glycerin	2 fl. dr.
Synthetic oil of rose	1 minim
Distilled water ... ... to	4 fl. oz.

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LOTIO HELIOTROPINI ALCOHOLICA. — HELIOTROPIN LOTION.—

Heliotropin	24 gr.
Castor oil	2 fl. dr.
Alcohol (90 per cent.) ... to	1 fl. oz.

MISTURA ACIDI ACETYLSALICYLICI.—ACETYLSALICYLIC ACID MIXTURE.—

Acetylsalicylic acid	10 gr.
Compound powder of tragacanth ...	5 gr.
Cinnamon water ... ... to	½ fl. oz.

Note.—The compound powder of tragacanth retards hydrolysis, and practically no salicylic acid is formed within seven days. If kept for prolonged periods, however, salicylic acid will crystallise from this mixture.

MISTURA ACIDI ACETYLSALICYLICI COMPOSITA.—COMPOUND ACETYLSALICYLIC ACID MIXTURE; A.P.C. MIXTURE.—

Acetylsalicylic acid	7 gr.
Phenacetin	5 gr.
Caffeine	1½ gr.
Compound powder of tragacanth ...	5 gr.
Syrup of orange	30 minims
Chloroform water ... ... to	½ fl. oz.

MISTURA ACIDI ACETYLSALICYLICI RECENS.—FRESH ACETYLSALICYLIC ACID MIXTURE.—

Acetylsalicylic acid	10 gr.
Potassium citrate	20 gr.
Neutral syrup of lemon	½ fl. dr.
Distilled water ... ... to	½ fl. oz.

Note.—Heat must not be used in preparing this mixture, as this expedites the conversion to potassium salicylate. 30 per cent. of the acetylsalicylic acid is hydrolysed at ordinary temperature in about four days.

MISTURA CALCII ACETYLSALICYLATIS. — CALCIUM ACETYLSALICYLATE MIXTURE.—

Acetylsalicylic acid	10 gr.
Saccharated solution of lime ...	110 minims
Neutral syrup of lemon	½ fl. dr.
Solution of carmine	1 minim
Distilled water ... ... to	½ fl. oz.

Shake the acetylsalicylic acid with 100 minims of the saccharated solution of lime and half the distilled water. Strain off any excess of acid and add the rest of the saccharated solution of lime and the other ingredients.

MISTURA CASCARÆ.—CASCARA MIXTURE.—

Elixir of cascara	1 fl. dr.
Tincture of belladonna,	
Tincture of nux vomica, of each ...	5 minims
Glycerin	½ fl. dr.
Cinnamon water ... ... to	½ fl. oz.

MISTURA HEXAMINÆ.—HEXAMINE MIXTURE.—

Hexamine	10 gr.
Acid sodium phosphate	30 gr.
Syrup of citric acid	30 minims
Distilled water ... ... to	½ fl. oz.

Note.—About 25 per cent. of the hexamine is hydrolysed in the above mixture in four days. If desired, the hexamine may be ordered in a separate bottle and mixed with the acid ingredients at the time of administration.

MISTURA QUININÆ ET FERRI.—QUININE AND IRON MIXTURE.—

Quinine sulphate	2 gr.
Diluted sulphuric acid	3 minims
Solution of ferric chloride	10 minims
Syrup of citric acid	30 minims
Chloroform water ... ... to	½ fl. oz.

MISTURA SODII SALICYLATIS.—SODIUM SALICYLATE MIXTURE.—

Sodium salicylate	10 gr.
Sodium bicarbonate	10 gr.
Liquid extract of liquorice	10 minims
Distilled water ... ... to	½ fl. oz.

NEBULA EPHEDRINÆ COMPOSITA. — COMPOUND EPHEDRINE SPRAY.—

Ephedrine	10 gr.
Menthol	10 gr.
Thymol	10 gr.
Liquid paraffin ... ... to	2 fl. oz.

Triturate the menthol and thymol until liquefied, add the ephedrine, set aside to dissolve, then add the liquid paraffin. Any slight turbidity in the solution may be removed by the addition of two drops of oleic acid.

OLEUM NEROLI SYNTHETICUM.—SYNTHETIC OIL OF NEROLI.—

Geraniol	20.00
Terpineol	10.00
Citronellol	20.00
Linalol	8.00
Linalyl acetate	5.00
Phenylethyl alcohol	5.00
Methyl anthranilate	2.00
Oil of petitgrain ... ... to	100.00

OLEUM ROSÆ SYNTHETICUM.—SYNTHETIC OIL OF ROSE.—

Geraniol	50.00
Citronellol	25.00
Terpineol	10.00
Phenylethyl alcohol	10.00
Geranyl butyrate	2.00
Oil of geranium	3.00

PIGMENTUM IODI COMPOSITUM.—COMPOUND IODINE PAINT; MANDL'S PAINT.—

Iodine	20 gr.
Potassium iodide	80 gr.
Oil of peppermint	20 minims
Glycerin ... ... to	4 fl. oz.

PULVIS ACIDI ACETYLSALICYLICI COMPOSITUS.—COMPOUND POWDER OF ACETYLSALICYLIC ACID; A.P.C. POWDER; COMPOUND ASPIRIN POWDER.—

Acetylsalicylic acid	7 gr.
Phenacetin	4 gr.
Caffeine	1 gr.

PULVIS BISMUTHI COMPOSITUS.—COMPOUND POWDER OF BISMUTH; MACLEAN'S BISMUTH POWDER.—

Bismuth oxycarbonate	2 oz.
Heavy magnesium carbonate ...	2 oz.
Sodium bicarbonate	1 oz.

PULVIS BISMUTHI ET CRETÆ.—BISMUTH AND CHALK POWDER; MACLEAN'S BISMUTH AND CHALK POWDER.—

Bismuth oxycarbonate	½ oz.
Heavy magnesium carbonate ...	1½ oz.
Sodium bicarbonate	1½ oz.
Prepared chalk	1½ oz.

PULVIS ZINCI COMPOSITUS.—COMPOUND POWDER OF ZINC OXIDE.—

Zinc oxide	1 oz.
Starch	1 oz.
Boric acid	175 gr.
Camphor	20 gr.
Oil of geranium	4 minims
Talc ... ... to	4 oz.

Triturate the camphor with the oil of geranium, then mix with the other ingredients, which must be in fine powder.

SPIRITUS AMYGDALÆ COMPOSITUS.—COMPOUND SPIRIT OF ALMONDS.—

Oil of bitter almonds	48 minims
Oil of nutmeg	48 minims
Oil of peppermint	48 minims
Chloroform	96 minims
Alcohol (90 per cent.) ... to	1 fl. oz.

Uses.—As a flavouring agent for emulsions use 5 minims to each ounce, to cover the taste of nauseous medicines 2 minims to each ounce.

SPIRITUS ANISI COMPOSITUS.—COMPOUND SPIRIT OF ANISE.—

Oil of anise	72 minims
Oil of peppermint	72 minims
Chloroform	96 minims
Alcohol (90 per cent.) ... to	1 fl. oz.

Uses.—As a flavouring agent for emulsions use 5 minims to each fluid ounce, to cover the taste of nauseous medicines 2 minims to each ounce.

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SPIRITUS AURANTII COMPOSITUS.—COMPOUND SPIRIT OF ORANGE.—

Oil of orange	96 minims
Oil of lemon	24 minims
Oil of coriander	8 minims
Oil of anise	2 minims
Alcohol (90 per cent.) to	1 fl. oz.

Uses.—As a flavouring agent for emulsions use 5 minims to each ounce. It is not so soluble in water as the two previous preparations.

SPIRITUS CINNAMOMI COMPOSITUS.—COMPOUND SPIRIT OF CINNAMON.—

Oil of cinnamon	48 minims
Oil of nutmeg	48 minims
Oil of pimento	48 minims
Chloroform	96 minims
Alcohol (90 per cent.) to	1 fl. oz.

Uses.—As a flavouring agent for emulsions, use 5 minims to each ounce, to cover the taste of nauseous medicines 2 minims to each ounce.

SYRUPUS FERRI PHOSPHATIS.—SYRUP OF IRON PHOSPHATE.—

Solution of ferrous phosphate	1 vol.
Diluted phosphoric acid	0.5 vol.
Distilled water	1.5 vol.
Syrup to	10 vol.

SYRUPUS FERRI PHOSPHATIS COMPOSITUS.—COMPOUND SYRUP OF PHOSPHATE OF IRON; PARRISH'S SYRUP; CHEMICAL FOOD.—

Solution of ferrous phosphate	1 fl. oz.
Precipitated calcium carbonate	¼ oz.
Potassium bicarbonate	9 gr.
Sodium phosphate	9 gr.
Syrupy phosphoric acid (s.g. 1.750)	270 minims
Cochineal	42 gr.
Refined sugar	13 oz.
Orange-flower water	300 minims
Distilled water to	20 fl. oz.

Dissolve the salts in the syrupy phosphoric acid diluted with 1½ fl. oz. of distilled water, add the solution of ferrous phosphate. Filter. Boil the cochineal with 5 fl. oz. of distilled water for fifteen minutes, filter and wash the filter with distilled water until the filtrate and washings together measure 7 fl. oz. In this dissolve the refined sugar with the aid of heat; when cold add the other solution, the orange-flower water and dilute with distilled water to the required volume.

SYRUPUS LIMONIS NEUTRALIS.—NEUTRAL SYRUP OF LEMON.—

Solution of lemon	1 fl. oz.
Syrup to	8 fl. oz.

Uses.—As a flavouring agent—1 fl. dr. to each ounce—when the official syrup of lemon and syrup of citric acid are incompatible on account of the acid they contain.

TABELLÆ ACIDI ACETYLSALICYLICI COMPOSITÆ.—COMPOUND ACETYLSALICYLIC ACID TABLETS; COMPOUND ASPIRIN TABLETS; A.P.C. TABLETS.—

Acetylsalicylic acid	3 gr.
Phenacetin	1½ gr.
Caffeine	½ gr.

Note.—Caffeine is used in these tablets instead of caffeine citrate, as the latter has a greater tendency to hydrolyse the acetylsalicylic acid.

TINCTURA MYRRHÆ ET BORACIS.—TINCTURE OF MYRRH AND BORAX.—

Purified borax	300 gr.
Tincture of myrrh	5 fl. oz.
Tincture of cinchona	1 fl. oz.
Tincture of krameria	1 fl. oz.
Tincture of quillaia	½ fl. oz.
Oil of geranium	5 minims
Oil of bergamot	5 minims
Synthetic oil of neroli	5 minims
Distilled water	3 fl. oz.
Alcohol (90 per cent.) to	20 fl. oz.

Dissolve the purified borax in the distilled water by the aid of heat and the oils in the mixed tinctures and the alcohol. Mix the two solutions and allow to stand for twenty-four hours. Filter and make up to the volume.

UNGUENTUM IODISATUM DECOLORATUM.—STAINLESS IODISED OINTMENT; UNGUENTUM IODI DENIGRESCENS.—

Iodine	½ oz.
Arachis oil, by weight	2 oz.
Hard paraffin	½ oz.
Soft paraffin, yellow to	10 oz.

Mix the iodine with the arachis oil in a wide-mouthed bottle, loosely corked, and heat in a water-bath at 70° to 80° C. until combination is effected. Mix with the other ingredients previously melted.

BIOLOGICAL CHEMISTRY

Brachycardia Distinctive of Vitamin-B Deficiency.—A. N. Drury and L. J. Harris, in a paper presented to the Biochemical Society at Cambridge on October 4, find that brachycardia is a distinctive feature of deprivation of vitamin-B complex. The slowing of the heart is of sinus origin and not due to vagus influence. It is caused by direct deficiency of the vitamin and not to lowered intake of food. Brachycardia can be cured rapidly in the entire absence of food by ingestion or injection of vitamin-B concentrates.

Antimony Trichloride Test for Cod-Liver Oil.—E. L. Smith and V. Hazley described at the October meeting of the Biochemical Society a new technique for the antimony trichloride colour test. They find that the unsaponifiable fraction from cod-liver oil gives with antimony trichloride in chloroform a blue colour proportional to its concentration. The original oil contains some substance inhibiting colour development, and the most direct solution of the problem is to remove this in the germ substances. The chromagen in cod-liver oil can be removed by extraction under suitable conditions with ether, ethyl acetate, or chloroform. It is possible to saponify the oil, extract the chromagen with chloroform without significant loss, and submit the solution after concentration to the colour test in no longer time than is required for the accurate determination of the dilution curve of the oil.

Action of Preservatives on Vitamin C.—J. Williams and J. W. Corran ("Biochemical Journal," XXIV, 1, 37) find that the substances which have the greatest preservative effect against fermentative bacteria and moulds exert the greatest destructive action upon the antiscorbutic activity of lemon juice. The optimum zone of stability lies between an acidity of PH 1.6 to 2.2, i.e., in the neighbourhood of natural acidity. Potassium metabisulphite is the best preservative of lemon juice, but it possesses a definite destructive action at ordinary temperatures. Lemon rind oil (0.07-0.275 per cent.) is less destructive to vitamin C, but less satisfactory than potassium bisulphite as an anti-ferment. It is pointed out that the antiscorbutic vitamin is particularly unstable under conditions detrimental to the development of moulds and bacteria. Lemon juice adjusted with hydrochloric acid to PH 1.6 retains its vitamin-C activity for fourteen months at ordinary temperatures (15°-18° C.).

DENTISTRY

Cleaning the Mouth.—J. L. O. Tilley, in the "British Dental Journal," November 1, 1930, tabulates details of the essentials of scaling and polishing. Cover the patient's neck and chest with a mackintosh. Remove any denture from the mouth which should be cleaned and polished. Level the edges of fillings which are not flush with the enamel. Polish and burnish any amalgam fillings. Syringe the pockets of the teeth with diluted eucalyptus 4 per cent. Apply analgesic balsam to the gums of the teeth which are to be scaled and cleaned. Having removed all tartar, syringe the pockets with an antiseptic and apply liq. hamamelidis to counteract local soreness. On the following day polish with fine pumice followed by a fine tooth paste. Syringe the pockets with

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a fine-nozzled syringe. Hydrogen peroxide is advocated, then syringe the mouth with a mild antiseptic. Cleanse the tongue, and with cotton wool swab the oral cavity with warm water to which is added eau de Cologne or tincture of myrrh. Drop into each pocket around the teeth liquor hamamelidis.

Ethyl Chloride Inhalations for Extraction.—Max H. Jacobs ("The Dental Cosmos," September 1930) gives the technique of administration of ethyl chloride to children, based on 123,210 cases during the past fifteen years without record of one fatality. Only primary anæsthesia, or the first stage of ethyl chloride anæsthesia, is secured and maintained, this period allowing sufficient time to extract all necessary teeth and roots, to lance and drain abscesses, or perform any other minor surgery. The patient should be put in a somewhat recumbent position. This is best done by tilting the operating chair backward. The knees should be strapped to the chair to prevent forward slipping. All garments around the throat are loosened. A rubber mouth-prop is inserted in the side opposite the operating area, and the patient told to bite firmly upon it. Fold together two layers of gauze about four inches long and four inches wide. This is of sufficient size to cover the oral orifice with the mouth open. Standing behind the patient, gently close the nostrils with the thumb and middle finger of the left hand. Place the gauze over the mouth, holding it in position with the index and ring fingers of the left hand. Permit the patient to breathe air by the mouth through the gauze for a moment. Holding the ethyl chloride tube several inches away from the face, the anæsthetic is sprayed on the gauze intermittently, not allowing the meshes of the gauze to become clogged by "frost." After inhaling ethyl chloride vapour for about thirty seconds, certain signs appear which indicate that enough ethyl chloride has been administered to permit operating. In some children it may take five or ten seconds more for the operating symptoms to appear.

Haley Treatment of Pyorrhœa.—A method of treatment of pyorrhœa, is given by P. S. Haley ("The Dental Cosmos," September 1930). Technique for the mechanical treatment is given to be followed by treatment of the pocket with a one-per-cent. chlorine solution. At the first sitting packing is done with a mixture of tincture of aconite, 90, and tincture of iodine, 10. The gums may be painted at the same time. Where rapid progress is desired and much tissue due to deep pocket formation and much swelling needs reduction, liquefied phenol may be used. This is squeezed from the twill until it is half dry, when it is packed. Packing should be done with slow pressure, and as little of it used as possible, so that the pack fully enters the pocket interior. At times tricresol with formalin may be used, though it must be very well squeezed from the pack, and the edges of the pockets painted with alcohol just after its insertion. Inasmuch as the presence of large numbers of spirillar and fusiform organisms is invariable in chronic suppurative periodontitis, some of the packing should be done with the use of specifics for these forms. Copper sulphate is one of these. Borax may be employed successfully, but copper sulphate is astringent and more generally germicidal. Where acute inflammatory reaction indicates the presence of that acute periodontitis designated as Vincent's infection, these drugs, with chlorine, may be supplemented by sulpharsphenamin in glycerin. This is prepared by dissolving 1.6 gm. sulpharsphenamin in ½ c.c. distilled water, and mixing with 30 c.c. glycerin. The pockets are swabbed with it and it is painted on the gums. Long-continued contact with the tissue causes soreness. In some cases, however, it seems nearly indispenable to treatment. The patient should use a paste prepared to remove tartar twice to six times per week. It consists of pumice, cuttlefish bone, glycerin and carbolated vaseline, with essential oils. It does not harm the teeth and prevents extreme tartar formation.

ESSENTIAL OILS

Petitgrain Oil from Tanganyika.—A sample of oil distilled in Tanga ("Bulletin of the Imperial Institute," No. 3, 1930) was examined. The oil was somewhat turbid, but on filtration became clear and pale yellowish, with the characteristic odour of this oil. The constants compare with those of a commercial oil from Paraguay as follows:—

—	Tanganyika oil	Paraguay oil
Specific gravity 15°/15°	0.8957	0.886 to 0.900
Optical rotation α_D	−5.25° at 17.5°C.	−2.75° to +5°
Refractive index n_D 20°	1.460	1.459 to 1.464
Acid value	0.7	Up to 2
Ester value ..	159.4	106 to 163
Esters (as linalyl acetate) per cent.	55.8	37 to 57
Solubility in 80 per cent. alcohol at 15°	Turbid solution even with 12 vols.	Sol. in 1 to 1.5 vols., sometimes with slight cloudiness

The optical rotation thus corresponds with the figure for French petitgrain oil (−1° to −8°). Two London firms of essential oil distillers reported on it:—(i) The analytical figures are about normal and the perfume good. It should be nearly as valuable as Paraguay oil, but first should be sold below the price of Paraguay oil to obtain a footing. (2) It is superior to Paraguay oil, but inferior to French. It should compete successfully with Paraguay oil.

Orange Oils from South Africa.—Three samples of oils prepared at Pretoria were examined ("Bulletin of the Imperial Institute," No. 3, 1930):—No. 1, "*Zebedelia, Greenish Valencias.*"—A pale yellow oil with odour of sweet orange oil. No. 2, "*Zebedelia Valencias.*" No. 3, "*Letaba Valencias.*" Nos. 2 and 3 resembled No. 1, but were golden-yellow in colour. Their constants were:—

—	No. 1	No. 2	No. 3	Sweet orange oil (recorded figures)
Specific gravity 15°/15°	0.848	0.849	0.849	0.848 to 0.854
Optical rotation α_D	+99.25°	+96.12°	+97.17°	+94° to +99°
Refractive index n_D 20°	1.4735	1.4735	1.4730	1.4725 to 1.4750
Non-volatile residue at 100°	2.3%	3.6%	2.9%	1.5% to 4%

Apart from the pale colour and slightly high rotation of No. 1, the three samples appear to be very similar and of excellent quality. A firm of essence manufacturers considered that No. 2 was the best, although they all fell short of good Sicilian oils. Two firms of manufacturing chemists considered that the odour compared favourably with Sicilian and other oils on the market. Nos. 2 and 3 were considered to be rather dark in colour, resembling in that respect Californian oils, which are not always considered suitable by users. The price would have to be lower than that of Sicilian oils in order to establish a market.

FIXED OILS AND FATS

Fatty Acids of Chinese Vegetable Tallow.—T. P. Hilditch and J. Priestman ("Chemistry and Industry," 49, 41, 397†) have determined the composition of the fatty acids and the glyceride structure of Chinese vegetable tallow derived from fruits of *Stillingia sebifera* (Euphorbiaceæ). The wax-like covering of the seeds consists almost entirely of solid glycerides which, when removed without damaging the seeds, form the "prima" quality of vegetable tallow as a hard cream or greenish fat. The fatty acids of stillingia tallow are mainly palmitic (57-69 per cent.) and oleic (21-34 per cent.), with smaller amounts of myristic (3-6 per

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cent.) and stearic (1-3 per cent.) acids. Fully saturated glycerides are present to the extent of 25-35 per cent. In the saturated-unsaturated glycerides, monooleodisaturated glycerides predominate as oleodipalmitins.

Brazil Nut Oil.—H. A. Schuette, R. W. Thomas and M. Duthey ("Journal of the American Chemical Society," 52, 10, 4114) have investigated the chemical and physical properties of Brazil nut oil (expressed, and that recovered from the residues by solvent extraction). The oil from fresh Brazil nuts was expressed in a small manual press; the residual meat pulp was then extracted in percolators with low-boiling petroleum ether, the final portion of which was in turn removed from the oil in the presence of carbon dioxide. A dark brown oil was recovered. The expressed oil possessed, after filtration, a pale yellow colour and a nutty taste. The more important chemical and physical characteristics of both oils were determined by recognised procedures. The statement that Brazil nut oil contains stearin, palmitin and olein has been confirmed, and to this list has been added myristin and linolein. The percentage composition of the residual oil was found to be as follows: Myristin, 1.79; palmitin, 13.55; stearin, 2.58; olein, 55.64; linolein, 21.65; unsaponifiable matter, 0.68; residues and undetermined, 4.11.

Fatty Acids of Fish-Liver Oils.—K. D. Guha, T. P. Hilditch and J. A. Lovern ("Biochemical Journal," XXIV, 2, 266), in a detailed comparison of the composition of the fatty acids of fish-liver oils, state that these stand apart in the approximate constancy of their general composition. The range for the liver oils of the Gadidæ (cod, coalfish, hake, ling) is as follows:—

	Per cent.	Mean unsaturation
Myristic acid	3.5— 7.0	—
Palmitic acid	6.5—13.0	—
Stearic acid	Nil — 1.0	—
Myristoleic acid	Trace 0.5	−2.0H
Palmitoleic acid	13—20	−2.0 to −3.0H
Oleic and linoleic acids ...	18—32.5	−2.8 to −4.0H
Unsaturated C_{20} acids ...	19—31.5	−4.9 to −7.3H
Unsaturated C_{22} acids ...	10—19	−5.4 to −10.0H

The flesh oils of two members of the herring family (menhaden and Japanese sardine) also fall within the above composition. The blubber fats of ordinary whales are the next closest approach, but these contain greater amounts of oleic and linoleic acids. The authors find that there is no apparent correlation between the vitamin potencies and fatty acid composition of fish oils. The highest vitamin activity was observed in liver oils of the family Gadidæ, but this may be fortuitous.

HYGIENE

Ultra-Violet Glazing.—H. E. Beckett in a recent "Bulletin" issued by the Building Research Board (Department of Scientific and Industrial Research) states that there are a number of glasses available which transmit 65 per cent. of rays of therapeutic value in thicknesses of 0.23 cm. Exposure to sunlight reduces transmission to 55 per cent. within three months, and accumulation of dirt effects a further falling off. An all-important point is that the available ultra-violet radiation falls off rapidly with increasing distance, and hence to obtain any therapeutic benefit it is necessary to sit within a few feet of the window. This reduces the space available for violet-ray advantage to a relatively small proportion of the floor area.

Paralysis from Cresyl-adulterated Ginger Extracts.—P. Valaer ("American Journal of Pharmacy," 102, 10, 571) describes the characteristics of spurious ginger extracts containing tri-ortho-cresyl-phosphate which have been responsible for an epidemic of paralysis in Mississippi, Tennessee and other American States, commencing last February. It is estimated that approximately 20,000 people have been poisoned by this cresyl-containing ginger extract, which causes paralysis of hands and feet. Many thousands will remain as hopeless cripples, as no recoveries have been reported yet, except in mild cases. The poisonous extracts contain about 2 per cent. of tri-ortho-cresyl phosphate, which is used technically as a plasticiser in celluose lacquers. Apparently the "bootlegger" who added this substance as a substitute for ginger resins was unaware of its paralysing action. Many dealers and distributors have been indicted, but it is not certain that the actual manufacturer has been apprehended.

MEDICINE

Magnesium Hyposulphite in Asthma.—M. J. Fenton ("British Medical Journal," 3647, 940) has been using magnesium hyposulphite in cases of asthma for some time past. So far, he has found no contra-indications to the use of this remedy, having used it in cases of from two to twenty-five years' standing. The treatment consists of intramuscular injection of 10-per-cent. solution of magnesium hyposulphite, at four-day intervals, together with oral doses of elixir magnesium hyposulphite (= 15 gr. of the salt) three times daily. The dose of the solution for intramuscular injection is 5 c.c., increased to 10 c.c. if necessary.

Hexylresorcinol as an Ascaricide.—Hexylresorcinol seems most nearly to fulfil the necessary requirements of an ideal ascaricide (Lamson, P. D., Ward, Charlotte B., and Brown, H. W., in "Proceedings of the Society for Experimental Biology and Medicine," 27, 1,017, 1930). It was given in doses of one gram in gelatin capsules to twenty patients harbouring ascarides; from 90 per cent. to 100 per cent. of these parasites were removed, as shown by carefully controlled egg counts. The results of experiments in 100 human cases of ascariases have been carefully studied and controlled, and will be published later. It has been shown to be extremely active in great dilution on the pig ascaris (*Ascaris suum*) *in vitro* in several hundred experiments; and it removed 100 per cent. of the ascaris in sixteen out of seventeen dogs as shown by autopsy. The therapeutic dose and best mode of administration remain to be worked out.

Amidopyrin in Measles.—G. W. Ronaldson and J. I. Collier summarise ("British Medical Journal," 3649, 994) the results obtained by a hospital staff with amidopyrin in 150 unselected cases of measles. The dose was 1 gr. for each year of age, with a maximum of 5 gr., every four hours day and night until the temperature settled. The authors find the action of amidopyrin to be chiefly antipyretic, but it appears to exercise some influence on the other symptoms of the disease. Its value is greatest when given in the earlier stages, and in some instances it appears to modify the attack, but even in the later stages its use may be followed by good results. In the dosage used by the authors it seems to be devoid of deleterious effects. They conclude that the use of amidopyrin merits further investigation over an extended series of cases.—In the same issue of the "B.M.J.," however (p. 996), W. H. W. Attlee, basing a brief paper on an experience of nine boys at school who were given amidopyrin and 120 who were treated without it, finds that the patients treated with amidopyrin were more uncomfortable than the others, their rashes took longer to mature, their fever was more prolonged, and the percentage of complications was higher.

Use of Sodium Amytal and Pernocton.—L. G. Zerfas reviews ("British Medical Journal," 3647, 897) the literature on the administration of sodium amytal (sodium iso-amyl-ethyl-barbituric acid). On the whole, administration by mouth or per rectum is preferred, reserving intravenous use for emergencies. It is considered that doses of from 3 to 9 gr. and not exceeding 15 gr. are comparatively safe limits for sodium amytal. It is seldom necessary to use more than from 7½ to 9 gr. In the field of anæsthesia there

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is ample evidence that sodium amytal is useful primarily as a hypnotic for the pre-anæsthetic preparation of the patient, and not as an anæsthetic agent. In the field of medicine it is useful for the control of convulsions, unmanageable mental cases, and as a specific for strychnine poisoning.—E. J. McKesson and K. C. McCarthy compare the respective suitabilities of sodium amytal and pernocton (sodium secondary-butyl beta-bromallyl-barbituric acid) as hypnotics. The average hypnotic dose of pernocton is 4½ gr., and it is administered intravenously in 10-per-cent. solution. The authors claim that pernocton has all the advantages of sodium amytal as a hypnotic, and in addition there is:—(1) Almost complete absence of restlessness and excitement during the recovery period; (2) no fall in the blood pressure; (3) a more powerful hypnotic effect; (4) a solution prepared ready for injection; (5) a smaller volume to be injected; (6) a shorter period of unconsciousness; and (7) better and earlier co-operation during the recovery phase.

Treatment of Pruritus.—L. F. R. Knuthsen and F. H. Humphris ("Lancet," 5585, 569), discuss the treatment of pruritus ani and pruritus vulvæ, success in which "taxes therapeutic ingenuity." Numerous complications are recognised. The small cracks which are of frequent occurrence may be treated by means of ultra-violet radiation and *x*-ray, but they may also be healed by painting them with friar's balsam or touching them lightly with a stick of silver nitrate. The treatment must persist until the most careful examination fails to reveal any trace of erosion. Those which are associated with pruritus of mycotic origin are more amenable to collosol iodine oil, or tinctura iodi (half strength), or mitigal, or some such prescription as Deek's ointment (half strength). The formula for Deek's ointment is:—

Salicylic acid	4 parts
Bismuth subnitrate	10 parts
Mercury salicylate	4 parts
Oil of eucalyptus	4 parts
Vaseline and lanolin equal parts up to	100 parts

As a general cooling lotion, and to ease the erythema after ultra-violet radiation (when erythema ought to be produced), a calamine and zinc oxide lotion is invaluable, and may be dabbed on the affected area two or three times daily. The need must be impressed upon every patient of thorough washing after each defæcation with some germicidal soap. After this the parts should be gently dried with salicylic acid wool and calamine lotion applied. Should any cracks or excoriations persist, the use of an ointment such as the following is recommended:—

Hyd. subchloridi	2 dr.
Bismuthi subnitratis	1½ dr.
Tr. aconiti	8 m.
Glycerini	2 dr.
Unguenti sambuci ... ... up to	1 oz.

to be used night and morning.

When a paroxysm of irritation is threatened, a 2-per-cent. carbolic lotion with spirit and rose water will often abort an attack. Pinching the irritable parts does much less harm than scratching, and affords equal relief. Spa treatment and other measures are also recommended.

Phenylcinchoninic Acid Therapy.—M. A. Rabinowitz reviews fifty cases ("Journal of the American Medical Association," 95, 17, 1228) of toxic symptoms after taking phenylcinchoninic acid (2-phenyl-quinoline-4-carboxylic acid), including twenty-five fatal cases. The author believes that only under certain conditions does the liver becomes sensitised to the toxic action of preparations of the acid. The duration of its use and the total amount ingested or otherwise introduced into the body have been found to vary in each case, one person developing ill effects after a comparatively small amount, intravenously or by mouth, while another may not develop it until after long-continued use. Predisposed are those with gall-bladder disease, cirrhosis of the liver, pregnancy, chronic alcoholism, chronic nephritis, those who in the past have suffered from liver disease associated with jaundice, and those showing other evidences of cinchophen intolerance.[1] The drug appears particularly dangerous in states of hepatic damage accompanying starvation, malnutrition, cachexia, chronic infection or tonsillectomy, after fevers, or in conditions favouring decreased glycogen content of the liver cells. A closer study leads to the suspicion that sensitisation of the liver to protein, whether by surgical trauma, inhalation, ingestion, or parenteral injection (milk preparations, such as lactogen and aolan or vaccines), renders it most susceptible to the toxic damage of the acid. In spite of all the precautions hitherto advised, its therapy has proved dangerous. Neither the associated intake of large amounts of fluid to aid more rapid elimination nor the use of large doses of sodium bicarbonate is a certain guarantee. Large amounts of readily assimilable carbohydrates, given with small amounts of insulin, might protect the liver by restoring its glycogen content. It has been proved that carbohydrate without insulin is insufficient for this purpose. The intravenous use appears dangerous. The drug should best not be used in ambulatory cases, as the earliest signs are thus likely to be overlooked. With the earliest appearance of toxic phenomena, the drug should be stopped and the patient sent to hospital.

OPTICS

Ephedrine and Glaucoma.—A. Barlow ("American Journal of Ophthalmology," August 1930) describes five cases in which the acute onset of glaucoma has appeared to coincide with the use of ephedrine for the treatment of nasal conditions. All yielded promptly to eserine, two were operated upon, and three were not, and the ocular condition of the non-operated patients has remained as good as that of those who were operated upon, although none of them has continued to use a myotic. The evidence is not conclusive, and further observations are being made.

Blind Spot for Colour.—C. E. Ferree, Gertrude Rand and H. A. Wentworth ("American Journal of Ophthalmology," August 1930) find that the distance of the centre of the blind spot from the centre of the field of vision for the achromatic and chromatic stimuli averages 16.5 degrees, and ranges from 14.5 to 17.5 degrees. The blind spot is larger for a black test object on a white field than for a white test object on a black field. The blind spots for chromatic stimuli are all much larger than for achromatic stimuli. Other findings relate to variations in size of the blind spot for different colours as seen upon backgrounds of varying brightness. As to satisfactory technique, grey of the brightness of the colour as background gives the best and white the worst results. The areas for the blind spots were measured by means of a planimeter. They represent the size of the blind spot at 33 cm.

Contact Glasses for Ametropia. — A. Rugg-Gunn ("Lancet," November 15, 1930) gives a description of contact glasses, their uses, and the procedure adopted in prescribing them. For examination of the patient a trial set of test lenses is available. The latter are arranged in series of three according to three standard scleral measurements. Each series has the same range of corneal radii—viz., from 5 to 11 mm.—representing the radius of curvature of the inner surface. The radii of the inner scleral curvatures measure 11, 12, 13 mm. respectively. It should be noted that the radius of the inner surface of the corneal portion is taken as the standard, as that of the outer surface varies according to the requirements of the patient. After examining the eyes in the ordinary way, and determining the amount and character of the refraction, the process of selecting the best contact glass is begun. The conjunctiva must be anæsthetised. Holocaine drops (2 per cent.) are preferable to cocaine. A small rubber sucker is pressed on to the convex surface to

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pick up the lens. The glass is held vertically by the attached bulb and filled with saline from a pipette. The patient leans forward until his face is almost horizontal, and while he is in this posture the surgeon controls the eyelids with the fingers of his left hand and directs the patient to look at the glass. The contact glass containing saline must be kept level and gradually apposed to the cornea, the lids being at the same moment swept over it by the left hand and the suction bulb removed. A small ivory spatula is provided for the removal of the glass. This is inserted under the rim so that the fluid drains away and the glass is allowed to drop on to a towel. Two separate and distinct determinations have to be made during the examination: (1) that of the most accurately fitting scleral brim; (2) that giving the necessary refractive power. An accurate fit is indicated by a complete zone of adhesion near the limbus. If contact is greater at the periphery than at the limbus the rim will rub, irritate, and become intolerable. Good vision depends entirely on corneal curvature, but comfort depends on scleral curvature. Having settled the matter of scleral fitting, the second problem, correction of the ametropia, remains to be considered. The particular glass to be tried first depends on the type of refractive error. For a patient with high hypermetropia, for example, one begins with a glass of small corneal curvature. Should the patient read 6/18 or better on the distant test-types, a trial frame is placed before the eyes and spheres (+ or −) added in order to decide whether vision can be still further improved. According to the result obtained other contact glasses, either with greater or less corneal curvature, are indicated, until the final result giving the best vision, with or without spherical additions, is arrived at. Where spherical additions are necessary it is important to ascertain another measurement, that between the vertex of the contact glass in situ and the back of the sphere in the trial frame. The necessary data for writing a prescription are now available. These are: (1) the scleral radius; (2) the corneal radius; (3) the amount (in dioptres) and sign of any additional correction; and (4) the distance in mm. between the inner spherical vertex and the contact glass vertex. With regard to (3) it should be noted that the additional spheres ought not to be higher than about 4 D., otherwise the contact glass would become too heavy. After the prescription has been dispensed the patient again attends in order to have his glass inserted by the surgeon. Most patients acquire tolerance surprisingly soon.

PHARMACOLOGY

Antimalarial Action of Cinchona Alkaloids.—J. A. Goodson, I. A. Henry and J. W. S. Macfie ("Biochemical Journal," XXIV, 4, 874) have carried out an extensive series of tests upon the febrifuge action of cinchona alkaloids. Canaries infected with *Plasmodium inconstans* were used for the biochemical tests, as they share with men susceptibility to malaria. Only the cinchona series of natural or derived alkaloids showed marked antimalarial action, hydroquinine being the most effective, followed in close order by quinidine, quinine, cinchonidine and cinchonine. Only in the case of quinine does hydrogenation appear to lead to increased activity. The test requires a much larger number of birds to grade substances accurately, but hydroquinine is definitely superior. Quitenine is inactive, but activity is conferred upon this and analogous carboxylic acids by esterification. There are clear indications of increase in potency along with molecular weight of alcohol used, the maximum being attained with butyl or amyl quitenine. Of other drugs used as febrifuges only *Alstonia scholaris* and *Alstonia constricta* showed slight antimalarial action, probably due to echitamine.

Ergot Alkaloids.—A. Stoll contributes a letter to "The Lancet" (5590, 873) setting forth the relative importance of ergotamine and ergotoxine. It is pointed out that for nearly ten years ergotamine preparations have been used in an ever-increasing measure, and hundreds of experimental and clinical research workers have shown that ergotamine possesses all the specific properties of official ergot. As yet no such clinical literature exists on ergotoxine. The view that ergotoxine-ergotinine, on the one hand, and ergotamine-ergotaminine, on the other hand, are different chemical substances has been maintained by the author since shortly after ergotamine was first isolated, and he has frequently and consistently supported this view by publishing comparative tables on the properties of both groups. Owing to the pharmacological identity of ergotoxine and ergotamine the chemical difference of the two substances has occasionally been questioned. Analyses executed under special precautionary measures and with the greatest care confirm the formulas of $C_{35}H_{39}O_5N_5$ for ergotinine and of $C_{33}H_{35}O_5N_5$ for ergotamine and ergotaminine.

PHOTOGRAPHY

The Oleobrom Process.—F. F. Renwick ("The Photographic Journal," December 1930), in discussing the theoretical side of this new printing process, set forth the difficulties in ordinary bromoil and how it has been possible to surmount them. Bromide papers for bromoil have in the past been coated with emulsions of low melting point so as to give the maximum of differential hardening between the shadows and the high lights during the bleaching process, and a corresponding difference in their tendencies to swell in water. Standardisation of such a quality has always been difficult, the more so because it varies with the age of the coated paper. In Oleobrom a start is made with a bromide paper coated with an emulsion uniformly hardened to the highest degree possible. The making of the silver print is done in the normal way, but the right type is easier to obtain. As the inking properties of the bleached print are affected enormously by the acidity of the surface of the print during the bleaching, the developed print is passed directly into a buffered acid bath, of boric acid and borax, to eliminate any local variations. This bath approximates very closely in acidity to the bleaching bath, which is a copper sulphate and bichromate mixture of the usual kind, similarly slightly buffered. This process allows the buffering and bleaching to be carried out directly after developing and before fixing; besides saving time, this is also found to give much the best results. While other inks may give passable results, it is recommended that the special Oleobrom ink be used. In the same issue a description of the practical side of the process is given by F. J. Shepherd.

Toning Chloro-bromide and Gaslight Prints.—H. W. Bennett ("British Journal of Photography," October 3, 1930) states that the richness and quality of the result of sulphide toning by the indirect method of bleaching and sulphiding depend entirely on the composition of the developer and the duration of development in making the print. If the same principle is applied to the production of gaslight and chloro-bromide prints the colour resulting from sulphide toning will be very similar to that obtained by toning bromide prints. The print before toning will be different from one prepared in the ordinary manner and not intended for toning, but that is immaterial. Either amidol or metol-hydroquinone may be used, and the two following formulas are suitable:—

Amidol

Amidol	40 gr.
Sodium sulphite, cryst.	320 gr.
Potassium bromide	10 gr.
Water to make	20 oz.

Metol-Hydroquinone

Metol	10 gr.
Hydroquinone	30 gr.
Sodium sulphite, cryst.	160 gr.
Potassium metabisulphite	40 gr.
Potassium bromide	10 gr.
Sodium carbonate, cryst.	320 gr.
Water to make	20 oz.

The Progress of Pharmacy and Allied Sciences

These are actual working strengths. The amidol solution may be prepared in a more concentrated form and diluted as required, and the metol-hydroquinone developer should be made from two stock solutions, one containing all the constituents excepting the alkaline carbonate, and the other the carbonate only. The alkali should never be mixed with the developing agent until the solution is required for use. The proportion of bromide to the developing agent is very important in prints intended for toning. The time of development is equally as important as the composition of the developer. The actual time of development for the solutions given will range from four to six minutes at a temperature of 60° F. If the tone should be slightly too warm, future prints should be developed for six minutes; if, on the other hand, a rather warmer colour is desired than that yielded by developing the print for five minutes, the time of development can be reduced. The essential feature of chloro-bromide paper is its capacity for producing deep brown or brown-black tones by direct development. That is its real value. If the prints are to be toned, chloro-bromide paper possesses no qualities that are not possessed in an equal degree by bromide. When toned there is no distinguishing character. The greater rapidity of bromide is an important factor, in ordinary work, in enlarging especially, and there is, apparently, no advantage to be gained by substituting chloro-bromide when the prints are to be toned.

VETERINARY MEDICINE

Therapeutic Value of Spleen Extract.—T. F. Arnold ("Veterinary Record," October 18, 1930) has obtained some remarkably successful results in the treatment of old standing cases of eczema in dogs and canker of the foot in equines by means of injections of spleen extract. The preparation used was extracted from sheep spleen with common salt. An extract prepared from horse spleen gave similar results, but an extraneous infection occurred, possibly by contamination during preparation due to inability to handle such a large organ aseptically. The dose given to horses and mules was 5 c.c., on every alternate day. The subcutaneous injection often resulted in abscess formation, so that injections were subsequently given intramuscularly.

Arthritis in Lambs.—C. S. M. Hopkirk and D. A. Gill ("Veterinary Record," October 4, 1930) discuss an arthritic condition affecting the limb joints of lambs in New Zealand. The cause is shown to be infection of the joints by an organism of the diphtheroid group, which is described. This organism on inoculation into the circulation of sheep appears to have a predilection for the joints. Reasons are given for believing that infection occurs under natural circumstances through docking and castration wounds. Prevention by the use of antiseptic methods at the time of operation and the provision of clean pastures during the subsequent days, while the wounds heal, is advocated. The organism is very similar to *B. erysipelatis suis,* and may perhaps be identical with it, though swine erysipelas is entirely unknown amongst the pigs of New Zealand. A name suggested as descriptive of the organism is *Corynebacterium osteoarthritidis ovis.*

Treatment of Ascites of the Dog. — G. N. Gould ("Veterinary Journal," October 1930) describes the treatment of two cases with injections of 1 c.c. Novasural every fourth day for four doses, with 10 gr. ammonium chloride in water three times a day. A diet of raw and cooked meat and milk was prescribed. Twenty-four hours after the first injection the dog passed urine copiously, and within two days a considerable decrease in the abdomen had occurred. Prior to the second injection the dog looked but half the size, the dyspnœa was less marked, and the appetite continued normal. After the third injection the diuretic action was not marked, and all traces of ascites had disappeared. A fourth injection was given and the ammonium chloride reduced to five grains three times daily, to be discontinued at the end of seven days. Both dogs are now fit and well, with no distress evident on exertion. The injection causes pain for an hour or two after administration, this was avoided by exercising immediately after injection. Novasurol is a double compound of sodium mercurio-chlor-phenyloxy-acetate and diethyl-malonyl-urea.

Hysteria in Dogs.—W. M. Scott ("Veterinary Record," November 1, 1930), in describing his method of dealing with these cases, states:—"When I began the treatment of those cases I relied—possibly like most practitioners—upon pot. brom. Then I tried sod. brom. and with this latter agent I got better results, or thought I did but still I was far from being satisfied; the action was too slow, too erratic, and, often, only temporary. During the last twelve months I have depended upon a mixture of the three bromides, i.e., sodium, potassium and ammonium, combined with ammoniated tincture of valerian, and by this treatment the mental disturbances were reduced more quickly and the recurrence appeared to be less frequent. Within the last few months I have gone a step further in treatment, but as it is largely in the experimental stage I do not feel that I should dogmatise. I give it, therefore, for what it is worth, with the view that others may be tempted to give it a trial and record their experiences. Rightly or wrongly, I am of opinion that hysteria is due to an imbalanced state of the endocrine glands, culminating in or preceded by a deficiency—of what, I do not know. The treatment is this. I begin by saturating the system with the bromides and valerian mixture, already mentioned, and when the disturbed nervous phenomena subside I give a course of hormones in tablet form night and morning before food, and after food tincture of iodine. In those cases I prefer the French tincture, for it contains less potassium and is tolerated better by the stomach. It is advisable to begin with small doses, 1 to 3 m., according to the size of the patient."

Coccidiosis in Poultry.—W. R. Kerr ("Veterinary Journal," October, 1930), in describing work on this disease carried out at the Harper Adams Agricultural College, Newport, Shropshire, states that results tend to show that the only method of control which can be advised with confidence is that of mechanical cleansing, and that disinfection by chemical means effects no control whatever; indeed, in many cases it seems to assist the sporulation of the oöcysts than destroy them. It is realised that drugs used for this purpose are limited in their action, and that results hitherto have been poor and inconclusive. Most of them are supplied to the affected birds through the drinking water, and when such bodies as mercuric chloride, potassium permanganate, hydrochloric acid, free iodine, etc., are used, enter into organic combination with the ingesta and mucous of the crop and gizzard, and are therefore inert bodies on reaching the intestine and cœca. Others have no direct action on the parasite, but depend on symptomatic treatment, such agents as astringents for example. Certain results have also been claimed for the use of dried milk, and similar products which affect a change of PH in the intestine. The possibility of iodine in this connection seemed impressive, and experiments were carried out to find the most convenient form in which it could be effectively administered. It was decided to use the power of casein to absorb iodine for this purpose. This preparation seemed to fulfil the desired conditions, and its use was extended to field work. The combination is as follows:—

Iodine Solution

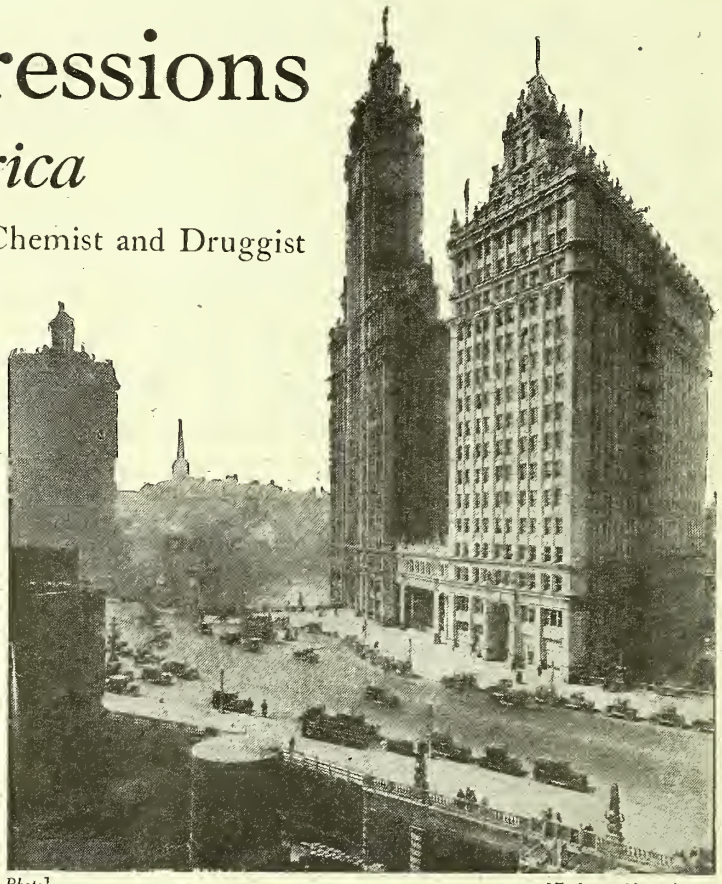
Iodine	1 part
Potassium iodide	2 parts
Water	50 parts

To 1,000 c.c. of fresh or separated milk add 200 c.c. of the iodine solution, heat until it becomes white. This is the stock solution, and one pint should be added to every gallon of drinking water used. Excellent results have been obtained by the use of this treatment on many farms.

Some Impressions of America

By R. CECIL OWEN, B.Sc., Chemist and Druggist

AMERICA is a country of contrasts. That is why everything is true of America. No two persons ever came back from America with the same impressions. The wealth embodied in her skyscrapers, her hotels, her shops and in her inconceivably expensive building sites is in sharp contrast with the filth and squalor and poverty of her back streets. The widespread sentimentalism of the home of "sob stuff" is seen in relief against a background of implacable dollar-making and dollar-worship. A sensitive and even "touchy" patriotism is based upon the most heterogeneous mixture of races to be found anywhere on the globe. Generous personal hospitality is balanced by a primitive general rudeness, so that the stranger is commanded to "Keep Off" and to "Wake Up." Most amazing of all, the famous American hustle is the counterpart of an actual lethargy and slowing down—in hotel service, in travel, in shops, in law, in legislation, in all manner of reforms. We in England do not "hustle," but we achieve all our purposes much more quickly. There is one golden rule for the traveller in America. It is



Photo] [*Exclusive News Agency*

CHICAGO: Michigan Avenue Bridge

MOVE ALONG QUICKLY

If this rule be disregarded the penalty is inevitable boredom. You may—and all sensible people do—stare at a mountain in the Alps or a fiord in Norway all day long. But what would you look at in New York or Chicago or Philadelphia or Los Angeles for a single hour? The attractions in these places are not (how can they be?) old churches or landscapes. They are, in the main, examples of modern engineering triumphs or places where dollars are made. Thus, your host does not show you a building for its beauty; he tells you its cost in millions of dollars. He does not take you over the local cathedral, but over "the finest dee-partmental store in the world." And never, by the way, are you shown any building in America without being told (and your reverence is duly expected) its cost; so that at last you think of Oscar Wilde's dictum about the people who know the price of everything and the value of nothing. And as you make your American pilgrimage you find that everything you see costs more than the last object of wonder—or is bigger or higher or heavier. Never by any chance is its beauty or its age or its historic significance extolled! Size, weight and dollar-value, being elementary notions, are easily grasped by even the most simple-minded tourist; the result is an impetuous urge to move along quickly, so that you find yourself "doing" America with a rapidity that leaves no regrets behind. I suppose that a majority of visitors to America arrive *via*

NEW YORK

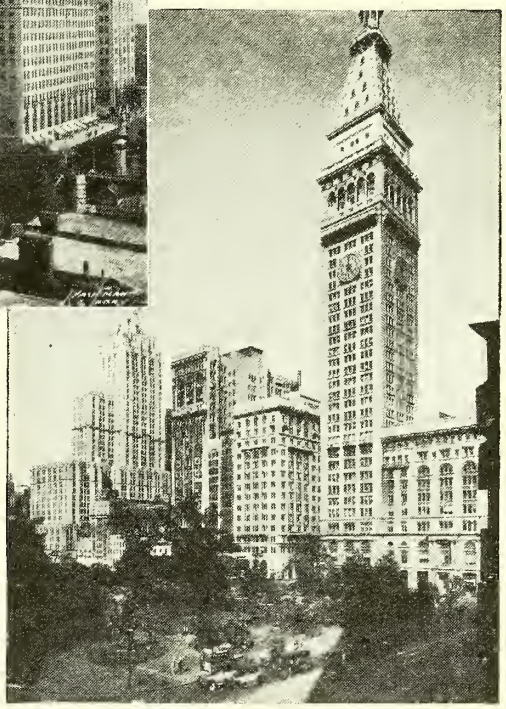
I am not going so far as to say that New York is America in miniature (there are so many Americas), but I do assert that in New York you will find all the contrasts of which I have spoken, and many more. Physically it has a dual personality. On the one hand are the skyscrapers—new, prominently placed, housing successful enterprises and erected at prodigious expense. On the other hand is a mouldering, rotting, putrescent hinterland where the poor hang precariously on to life. The skyscraper section has its counterparts in the expensive and exclusive apartment houses ("flats") of Fifth Avenue and elsewhere, in its museums and "select" churches and public parks; the rest is dirt and dissolution. Dirt, indeed, is everywhere. When cleanliness pays—as in the lounge of hotels for the affluent—there it is. But I found no cleanliness anywhere that did not have an immediate value in terms of dollars. Thus, the "working alley ways" of hotels, the street gutters, the roofs of motor cars, the odd spaces of public bridges, the curtains of motor coaches, the less showy parts of the much-vaunted railway stations, the "practical" sections of wharfs and quays—all were the repositories of filth and waste matter which, apparently, it was nobody's business to remove! This and much more goes to show how little pride is taken by America in work as such, for work is only of interest in so far and wherever it has a value in dollars. And this again explains the universality of the tipping system. No servant performs even the slightest service apart from a tip. Fail to tip, or tip inadequately, and service ceases as surely as darkness flees with sunrise. Did space permit I could give many amusing and illuminative examples of this truth. . . . The far-famed Statue of Liberty is the first item of interest to excite the passenger as he steams up the Hudson. It is claimed to be the biggest statue in the world. Statistics prove that it is! But the irony is, that though it is big it does not look big. Indeed, as time goes on it seems to become smaller and smaller, thanks to the increasing number of tall buildings that are defying the heavens on the opposite side of the river. And the far-famed statue has for its setting a nondescript collection of shapeless warehouses and dirty quays. As you turn your back on Liberty and approach



TYPICAL VIEWS OF AMERICAN SKYSCRAPERS

Left : Chicago

Below : New York City



THREE VIEWS OF CHICAGO







Photos] *[Exclusive News Agency*

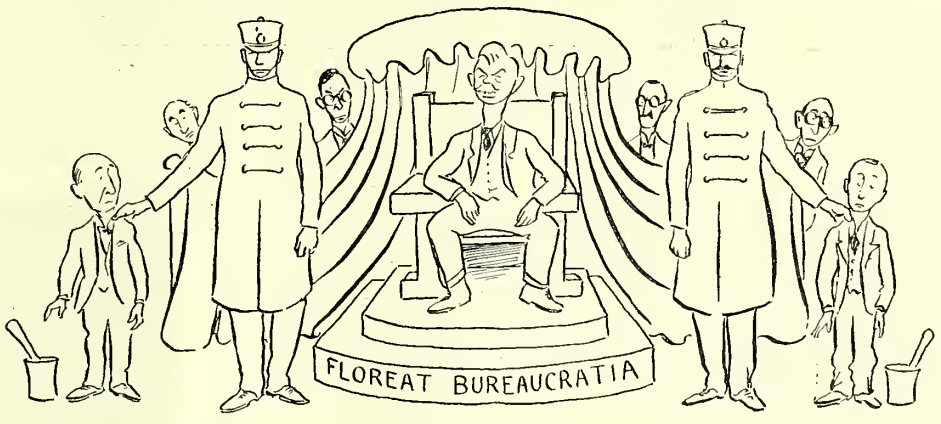
New York proper the equally famous skyline greets you. Before you are allowed to land the immigration officer cross-examines you; but let the temporary immigrant fear not, for with tact and boldness he can quickly elude the officer's curiosities. Further, if you weigh up the American mentality quickly you can as rapidly "get your baggage through the Customs" and make your way to your hotel. Let me say here how useful it is "every day and in every way" to understand and to imitate the American mind. My advice in a word is this: Be, like the American, on all occasions—rough and tough. Leave your English breeding and politeness on the boat. Speak in a loud voice, be emphatic, swear, show impatience, crack a joke if possible, but always wear the don't-care-a-d——for-anybody attitude; in short, pretend that you are a two-hundred per cent. American, and you will find that a small tip goes as far as a big one, that service will be given you rapidly and willingly, and that by no other method will you get so much of your own way. The streets of New York are canyons. As time goes on, and all the low buildings are pulled down to make room for high buildings, the streets will become super-canyons. Despite its proximity to the ocean, New York is, and always has been, hot. Its canyon-streets make it super-hot. During the summer months there is no coolness, day or night, till you get to the coast. The manufacture and sale of ice (here and everywhere) is an enterprise of the first importance. And the remedy is worse than the disease. Ice-water (laid on in your bedroom!) does not cool, and does not quench the thirst, as neither do the iced fruit drinks that are sold in countless shops, many of them selling nothing else, even in the highest-rented parts of the city. You travel about New York (if you cannot afford a taxi) by street-car (tramcar, as we call it), by underground railway ("subway" in the local terminology), and by overhead railway. Now, these modes of transit are cheap and rapid; but the queer thing, to English eyes, is the gratuitous ugliness of it all! The street-cars (in New York, mark you!) are ugly, old, decayed out-of-date in design and badly needing a coat of paint. The "Underground" stations are ill-lit, dirty, gloomy and reminiscent of the old London Underground of the 'eighties. The Overhead is all these things intensified, and it is slow and more than usually decrepit-looking. Two of the things best worth seeing in New York are the Bowery—and the Bread Line. The latter is a queue of the really poor, whose destitution is such that to obtain a loaf of bread they "queue up" outside an office to obtain a ticket which entitles them to the loaf. The queue is endless, in space and in time, and is privately financed by wealthy and benevolent Jews. The Bread Line is the counterpart of our unemployment insurance. The Bowery is that district where the really poor dwell. Here is decrepitude *in excelsis*. The shops, the goods exposed for sale and the custodians thereof are alike —"fly-blown."

During my stay I was a member of a party whom a group of wealthy and well-intentioned people desired to entertain. Did the entertainment take the form of a Wagner-Beethoven Recital or the performance of a brilliant play? It did not. Instead, we were taken, in all solemnity, and with a police escort which held up all traffic *en route*, to Coney Island! Incidentally, we had the best dinner any of us ate in U.S.A. The menu included iced clams, grilled lobster and fried chicken (for no good dinner is complete in America without fried chicken!) But Coney Island! What did we find, after being taken there with so much *éclat*? A nigger jazz-band to meet us, and for the rest, swings and roundabouts, scenic railways, side-shows displaying the fattest woman on earth and the thinnest man ditto—a magnified village fair.

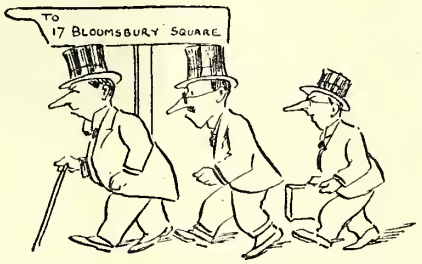
New York never sleeps. The blazing skysigns (Smoke Songo, Drink Dingo, Chew Chewso) carry on their educative purposes all night long. Taxis and motor-cars race along, the sidewalks echo the clatter of pedestrians' feet, the din of hustling traffic goes on, and shops are open or are fully lighted all through the night. And then it is that the weary sightseer is so glad to seek rest in a hotel of thirty floors. Up aloft—my bedroom was on the twenty-second floor—the din is muffled, and, moreover, the air is cooler than down below.

CHICAGO

is "a horse of a different colour." There is much more in Chicago to delight the eye and brace the senses. The city (the largest in U.S.A. after New York) stands on the west bank of Lake Michigan; and runs along the lakeside, north and south, for twenty miles! This thin strip contains all that is delectable in the city. At the edge of the lake is a long chain of bathing beaches, and little harbours for small yachts, with here and there piers, wharfs and quays for the accommodation of the large vessels that carry passengers and cargo across the lake—which is 500 miles in length and eighty miles broad. Immediately to the landward of the beaches is a series of narrow parks, richly ornamental and well tended. Then come the roads, many of them without buildings on the lakeward side. In the middle of the strip is Michigan Boulevard, a wide, handsome and well-kept thoroughfare containing many fine shops and all the best hotels. Then, north and south of this shopping and hotel district, are the residential districts. The houses are, in the main, expensive, exclusive, often standing in pleasant gardens, and altogether what house agents over here call "desirable." A friend of mine owned one such house. I was staggered to learn its cost. It was not a big house—you would buy it in England for about £3,000. With the land it cost him half a million dollars—£100,000! Bathing is a universal pastime during the hot summer months. (The temperature when I was there was 100° F. in the shade.) The sand is firm and clean. Thousands of citizens of all ages and both sexes so crowded the beaches that the sand was scarcely visible. Here is an interesting fact. One large beach was devoted to negro bathing. No whites were to be seen—but thousands of negroes of all grades of wealth. The remaining beaches were more socially homogeneous. One beach would be the resort of the poor, another of the middle classes, while a third was patronised only by the wealthy. Occasionally a millionaire would have a private beach adjacent to his house! So much is delightful and amusing. But leave the thin strip at the lakeside and go inland one "block" (or street) and you will find the dirtiest and most ramshackle town on earth! The squalor and filth outvie New York's, and that is saying much. Look at Chicago as you approach it by rail. Seeing only the backs of so many houses increases the sense of dissolution. Many of the buildings are of timber—black, damaged timber, rotting rapidly. And the people are, as the phrase goes, in the picture. They sit about their decaying dwellings, themselves in decay, unwashed and but scantily dressed, surrounded by unwashed infants. Men and women appeared to have lost interest in life and to be content to drift and die. But come nearer to the affluent quarter. There are prosperous shopping streets in the hinterland of Chicago —but they are brutalised and made ugly and repulsive by the same carelessness and lassitude which is found everywhere except where dollars can be immediately won. For example, there are no underground railways in Chicago, but only overhead lines. These run, for great distances, over the middle of the shopping streets. One result is that, even in brilliant sunshine, the streets are gloomy. Another result is that traffic is held up and impeded by the supports which carry the overhead line. Again, these same supports have been designed to effect (it would seem) a maximum of ugliness. No attempt whatever at elegance has been made. The railway is supported on bare iron uprights —urgently needing first a wash and then a coat of paint. Nothing so dirty, so ugly and so obstructive would be tolerated in these islands. And the stations, reached by equally dirty, iron stairs, are neglected and unclean. Cigarette ends and filth are allowed to accumulate: why spend precious dollars on being merely clean? How spotless and beautiful seem our London tubes by comparison!



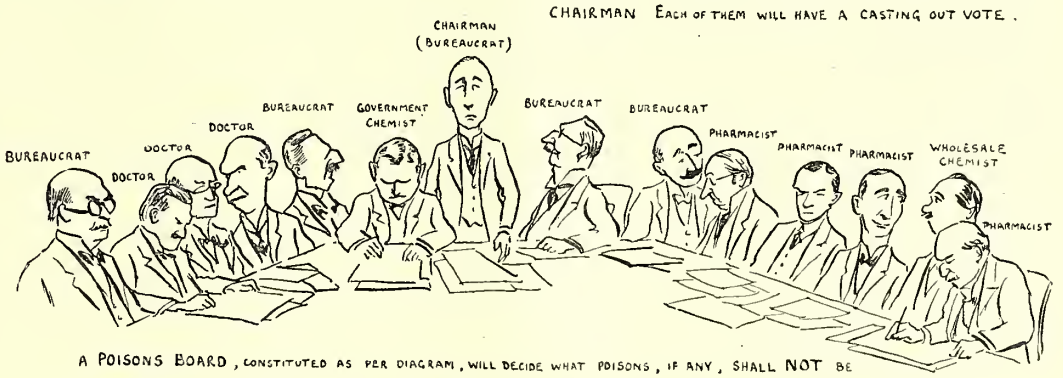
THE DRAFT PHARMACY AND POISONS BILL PROMPTS THE ABOVE SUGGESTION FOR ARMS OF THE PHARMACEUTICAL SOCIETY.



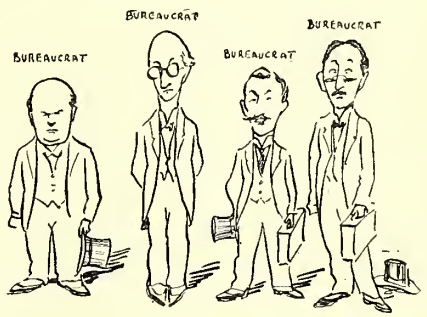
THE PRIVY COUNCIL WILL APPOINT 3 ADDITIONAL MEMBERS OF THE PHARMACEUTICAL COUNCIL.



THE PHARMACEUTICAL COUNCIL WILL APPOINT A COMMITTEE OF 4 PERSONS, WITH POWER TO CROSS PHARMACISTS OFF THE REGISTER. THE PRIVY COUNCIL WILL APPOINT A LAWYER CHAIRMAN EACH OF THEM WILL HAVE A CASTING OUT VOTE.

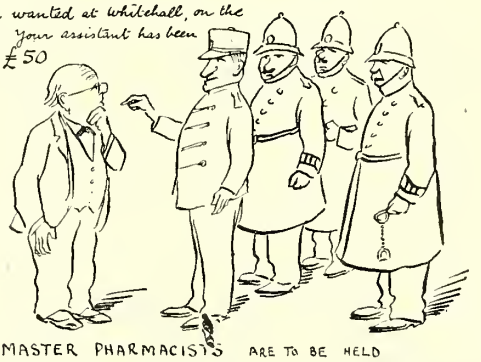


A POISONS BOARD, CONSTITUTED AS PER DIAGRAM, WILL DECIDE WHAT POISONS, IF ANY, SHALL NOT BE SOLD BY UNQUALIFIED PERSONS, AND THE HOME SECRETARY MAY, AND MOST PROBABLY WILL, APPOINT——



4 OTHER GENTLEMEN TO SIT ON THIS BOARD, NO DOUBT TO ACT AS A DILUENT, IF FIVE OF THE OTHER INGREDIENTS BECOME TOO PUNGENT

GRANVILLE SHAW 1930



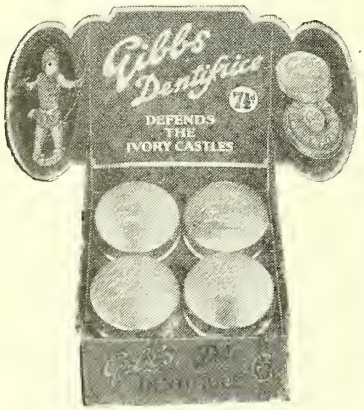
MASTER PHARMACISTS ARE TO BE HELD RESPONSIBLE FOR CERTAIN OFFENCES COMMITTED BY THEIR EMPLOYEES!! IS THIS THE LATEST FASHION FROM MOSCOW?

FORECAST (UNOFFICIAL) OF THE NEXT PHARMACY ACT

Trade Notes

CHRISTMAS GREETINGS.—The season's greetings are conveyed to their friends through the advertisements in this issue by the following:—Allen & Hanburys, Ltd.; J. W. Lightbown & Sons, Ltd.; Liverpool School of Pharmacy; London College of Pharmacy; May, Roberts & Co., Ltd.; Francis Newbery & Sons, Ltd.

GIBBS' DENTIFRICE.—D. & W. Gibbs, Ltd., Wapping, London, E., are packing their well-known dentifrice in an improved container. The lower portion of the aluminium box is now in the form of a shallow tray, which not only enables the tooth soap to be used so long as any remains, but there is no likelihood of the tray having a harmful effect on the bristles of the brush, as was the case with the former type of tin. Messrs. Gibbs do not propose to exchange old stock, but the new package will not be advertised to the public until May, so that chemists will have ample time to dispose of their present stock. A special display outer is being used for the new container, so that by selling tins of the dentifrice from the back of the box the display itself need not be disturbed.



Business Changes

JOHN RONALDSON & Co., 7 Mark Lane, E.C.3, have removed to 15 Seething Lane, London, E.C.3.

THE address of the American Hard Rubber Co. (Britain), Ltd., 13A Fore Street, E.C.2, is, on and after December 25, 95 Hatton Garden, London, E.C.1. Telephone: Holborn 6037.

Personalities

MR. A. J. KING, "Lyss," 15 Guild Hill Road, Bournemouth, senior representative of J. C. Eno, Ltd., has retired.

MR. T. E. WILLIAMS (T. E. Williams, Ltd., chemists, Caerphilly) has been elected a vice-president of the local chamber of trade.

MR. R. H. MORGAN, chemist and druggist, has been appointed dispenser to the Cardiff Outdoor Dispensary. Mr. Morgan served his apprenticeship at Newport, Mon.

M. SIGALAS (Dean of the Bordeaux Mixed Faculty of Medicine and Pharmacy) has been nominated Commander of the Legion of Honour. M. Jadin, Dean of the Strasburg Faculty of Pharmacy, and Pharmacist Lieutenant-Colonels Didier and Frumont are promoted Officers of the Legion.

Marriages

FORDHAM—FREEMAN.—At St. Clement Danes Church, Strand, London, W.C., on December 20, Wilfred Gurney Fordham, son of Mr. Edward W. Fordham, Mill Vale, Bromley, Kent, to Eugenie, elder daughter of Mr. W. Marshall Freeman, barrister-at-law and pharmacist, Beckenham.

Deaths

BULLIONS.—On December 15, Mr. John Bullions, chemist and druggist, Felling-on-Tyne, aged fifty. Mr. Bullions commenced business at Pelaw in 1913. He was an elder of the Presbyterian Church and a freemason.

EVANS.—At 6 Milsom Street, Bath, on December 16, Mr. David Albert Evans, chemist and druggist, aged fifty-two. Mr. Evans was born and apprenticed at Narberth. Shortly after qualifying in 1902, he went as assistant to Steele & Marsh, Milsom Street, Bath; he subsequently became manager for the executors and eventually proprietor. The firm was founded in 1848 by two pharmaceutical chemists, Thomas Steele and John Hoskins Marsh. After Mr. Steele's death in 1857 Mr. Marsh continued to trade under the old name till 1902. The pharmacy has always had an extensive dispensing connection, and several of the proprietaries introduced by Mr. Evans or his predecessors have a wide sale. The business was described and illustrated in THE CHEMIST AND DRUGGIST, 1924, II, 24. Mr. Evans also established the Lotor Manufacturing Co., Morford Street, for the manufacture of bath salts and other products. For several years past he had taken a prominent part in local affairs, having been president of the Bath and District Pharmaceutical Association (1917-19), president of the Bath Chamber of Commerce, and governor of King Edward's School; he was also a well-known freemason, and had other interests. Mr. Evans leaves a widow, a son and two daughters. The funeral, which took place at Bathwick Cemetery on December 20, was attended by a large gathering of relatives, friends, and representatives of various organisations with which Mr. Evans had been associated. Among those present were the following representatives of the Bath and District Branch of the Pharmaceutical Society: Mr. T. Rees (president), Mr. J. Aspell, Mr. W. J. Hallett, Mr. C. Jenkin, Mr. R. H. Moore, Ph.C., Mr. F. R. Stent, Mr. E. Williams and Mr. Luther Wilson. The numerous floral tributes included a wreath from the Bath and District Branch.



MR. D. A. EVANS

HANKINSON.—On December 19, Mr. Alfred William Hankinson, chemist and druggist (A. W. Hankinson & Son, Chemists, Main Street, Grange-over-Sands). Mr. Hankinson qualified in 1887.

KIRKBY.—At Rotorua, N.Z., on October 29, Mr. Thomas H. Kirkby, a well-known chemist and druggist, of Rotorua, aged sixty-six.

RICE.—Recently, Mr. William Frederick Rice, chemist and druggist, Combe Down, Bath, aged thirty-four. Mr. Rice commenced business at Combe Down eight years ago. He was a member of the Bath and District Branch of the Pharmaceutical Society, and was highly esteemed.

TENNENT.—At Auckland, New Zealand, on October 30, Mr. Charles F. E. Tennent, chemist and druggist, aged sixty-three. Mr. Tennent was born in Liverpool, and went to New Zealand with his parents fifty-five years ago. For some time Mr. Tennent was in partnership with his father, Dr. C. E. Tennent, a veteran of the Indian Mutiny and Crimean War. At the time of his death Mr. Tennent was the first manager of the all-night dispensary in Auckland.

WILLOUGHBY.—At Devonport, on December 12, Mr. Arthur John Willoughby, chemist and druggist, aged sixty-nine.

Observations and Reflections

By Xrayser III

Your New "Diary"

has arrived in good time, and I find its wonderful collection of useful information appeals to me with even greater force than that of any of its predecessors. The Buyers' Guide, with all the finely-displayed advertisements behind it, has a specially appealing force because of the invaluable assistance I know it will afford in what otherwise would be times of trouble. To know what is obtainable, and where to obtain it, is a precious asset to the retail dealer, and our grateful thanks are due to the *C. & D.* staff for doing so much to enable us to maintain the position of being better informed than other dealers concerning so much that the public wants to know. Next in order I place your legal compendium, which helps us to avoid the numerous pitfalls that beset us in the course of business. Then I turn to the section on applied pharmaceutics, the practical nature of which must commend it to every true pharmacist. It seems odd to realise that registration of formulas in the *Diary* is no longer operative, and it is well to be reminded in this respect to what extent one of our old privileges has been prejudiced by the action of some proprietors of certain well-known preparations. But this grouse is by the way, as it is only fitting that I should end this reference to the new *Diary* with an expression of satisfaction with what the book contains.

So The Bill

has actually made its debut in the House of Lords. Judging from what is stated in the report, such as it is, of the recent special meeting of the Pharmaceutical Society's Council (*C. & D.*, December 20, p. 771), introduction of the Bill has been hastened somewhat, with the result that the Council has been caught napping. Apparently suggested amendments of the draft Bill were being considered at the very time that the actual measure was being introduced, and there are still to be important stages in the consideration of those amendments before they can be submitted to Parliament. No one can accuse the Council of undue haste in this matter, either in getting on with the job or in letting the members of the Society and the trade at large know what action it is intended to take in the interests of chemists and druggists generally. That so much dissatisfaction should be expressed in letters from your correspondents is not at all surprising, but I should like to ask the chemists of the country whether they are not largely to blame for waiting so long and with such unjustifiable patience to learn what the policy of the Council was to be. Even yet this is unknown, though a Pharmacy and Poisons Bill is now before Parliament.

Word Arrangement

leads at times to unexpectedly humorous combinations, and your correspondent "Temerity" has undoubtedly discovered in one of my notes a statement that might have been expressed with greater precision (*C. & D.*, December 20, p. 783). My excuse must be that I wrote as I should probably have spoken, and as "Temerity" himself would doubtless have spoken, if conversing with a friend. In writing we endeavour to make clear what would have seemed to be clear enough in colloquial speech by the insertion of commas, or by rearranging the order of the words, as might have been done in the instance in question by letting the words "in the public eye" immediately follow the word "importance." Had it been possible for me to see a proof of the printed matter, this alteration might have been made; but such perfection of procedure is not often practicable where weekly contributions to the *C. & D.* are concerned.

In Spite of the Great Advance

made in the science of dietetics, perhaps as much indigestible food will be consumed this Christmas as ever before. Of all the comestibles of the Christmas menu the most constant feature will be the plum pudding, which is a dish of comparatively recent origin; it cannot be regarded as having an assured place for more than a hundred and fifty years. About two hundred years ago there was published a book which has become quite famous as a literary item. It is "The Art of Cookery, made Plain and Easy," by "a Lady," and it appeared in 1747; this work may be accounted the first to inaugurate a new era in the literature of cooking. The author has been said to be a Mrs. Hannah Glasse, the wife of an attorney living in Carey Street. Whether this ascription is correct or no is not of much concern at the moment; it was matter for discussion in Dr. Johnson's day, as appears from Boswell's account of what transpired between himself, Dr. Johnson and Miss Seward, when the statement was made that Dr. Hill was really the author of it. It was on that occasion that the discriminating doctor made his well-known comparison between cooking and pharmacy.

In this Volume

there are two recipes specially designated for the Christmas table, and these, I think, are excellent examples of the gustatory habits of that day and are in so striking a contrast to our own more restrained tastes as to provide food for reflection as well as some indication as to why gout and other disorders due to gross eating and drinking have so greatly declined. It is well known that our plum pudding is a substitute for the Christmas plumb-porridge of that day; this is an outline of the recipe for the latter as given by Mrs. Glasse:—"Take a Leg and shin of Beef"; with these a broth was made with eight gallons of water; six penny loaves, five pounds of currants, five pounds of "Raisins of the Sun," two pounds of prunes, three quarters of an ounce of mace, half an ounce of cloves, two nutmegs, three pounds of sugar, a quart of sack, a quart of claret, the juice of two or three lemons were the other ingredients. In place of the bread—from which the crust was removed—sago could be used. The method of cooking comprised sundry boilings and strainings. The other Christmas dish deserves to be quoted in full because of its topical character. "To make a Yorkshire Christmas Pye—First make a good standing Crust, let the Wall and Bottom be very thick; bone a Turky, a Goose, a Fowle, a Partridge and a Pigeon, season them all very well; take half an ounce of Mace, half an ounce of Nutmegs, quarter of an ounce of Cloves and half an ounce of Black Pepper all beat fine together, two large spoonfuls of Salt and then mix them together. Open the Fowles all down the back and bone them, first the Pigeon, then the Partridge, cover them; then the Fowle, then the Goose, and then the Turky which must be large; season them all well first, and lay them in the crust so as it will look only like a whole Turky; then have a Hare ready cased, and wiped with a clean cloth. Cut it to pieces, that is jointed; season it, and lay it as close as you can on one side; on the other side Woodcock, more game and what sort of wild Fowl you can get. Season them well and lay them close; put at least four pounds of Butter into the Pye; then lay on your lid, which must be a very thick one, and let it be well baked. It must have a very hot Oven, and will take at least four Hours. . . . These Pyes are often sent to London in a Box as Presents." One wonders if some Yorkshire friend will send such a Christmas Box this year.



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Editorial Article

An Eventful Year

A YEAR ago we had occasion to refer to the lack of any definite information concerning the outcome of the deliberations of the Departmental Committee on the Poisons and Pharmacy Acts, and the present year was well advanced before the report of that body was issued. Its contents were immediately disclosed to readers of THE CHEMIST AND DRUGGIST, the draft Pharmacy and Poisons Bill which crystallised the views of the Committee being published in full, together with the text of the memorandum in which the late Sir William Glyn-Jones conveyed his considered views regarding the needs of the situation.

DRAFT PHARMACY AND POISONS BILL

In that memorandum he advised that a Pharmacy Board should be set up to take over the control of pharmaceutical training and examinations, to make regulations for governing the storage and sale of poisons, and the performance of the functions of the pharmacist, to frame the Schedule of Poisons, and to be the prosecuting authority for the enforcement of the provisions of the Pharmacy Acts and the regulations made thereunder. This proposed deprivation of these important functions of the Pharmaceutical Society would, Sir William suggested, leave the Society free to protect and enhance the interests of its members, and make possible a fusion of the Society, the Retail Pharmacists' Union, and the Chemists' Defence Association. It may be that he saved the situation to some extent, because there appeared to be a possibility that changes were originally contemplated which would have swept away the measure of self-government we possess and placed pharmacy under the control of an extraneous body. Unfortunately, it had been decided at an early stage of the Committee's deliberations that its terms of reference did not permit the extension of the inquiry to matters unconnected with poisons, except in so far as those matters were implied in or were immediately subsidiary to questions connected with poisons. Accordingly, the Committee gave no consideration to the general question of dispensing medicine apart from poisons, and refused to discuss and define "the business of a pharmaceutical chemist or chemist and druggist," in the widest sense of those words. As a result, the Bill which

embodies the recommendations of the Committee fails entirely to deal with the subject of pharmacy proper, the part of the measure which purports to do so being practically limited to proposals for reconstruction of the Pharmaceutical Society, the registration of pharmacies, and the restriction of use of certain titles. This is all the more to be regretted because the Departmental Committee bears witness in its report to the obvious distinction between poisons and pharmacy, and to the desirability in the public interest of effecting their severance. In that severance, we are told, lies the key to the recommendations of the Committee; yet the opportunity to show how pharmacy as a business can be established upon a definite basis, apart from the sale of poisons, was allowed to pass. It now remains to be seen whether the omission by the Committee can be made good when the measure embodying its recommendations is passing through Parliament. Obviously, the initiative in proposing amendments that will make the draft Bill more acceptable to chemists and druggists rests with the Council of the Pharmaceutical Society, which is understood to have had the matter under serious consideration for the past nine months, though nothing has yet been disclosed concerning the attitude likely to be adopted in dealing with the proposals set forth in the draft Bill. At the outset, the Society's members and branches were asked not to discuss those proposals in public; similar secrecy was enforced at a delegates' meeting held at Cardiff, and the actual Bill has been introduced in the House of Lords (the text is printed on pages 810-15 of this issue) before the chemists and druggists of this country have been favoured with any intimation of the considered views of the Council of the Society and its intentions in the matter. Much has been said about the desirability of the Bill introduced being made an agreed measure, including suitable amendments, but the consent of the members of the Society has yet to be obtained for the course the Council proposes to pursue, and any question of amendment must now be raised in one or other of the Houses of Parliament. In other directions the Council has been busily engaged during the year, one important project which has occupied its attention being a scheme for consolidation of the examination regulations. This has been the subject of comment in our columns quite recently, and no further reference is at present needed except to emphasise our condemnation of the short-sighted policy which dictated publication of particulars of the scheme at what appeared to us a most inopportune time. Arrangements for proceeding with revision of the British Pharmaceutical Codex were completed early in the year, and a provisional understanding has been reached with the Pharmacopœia Commission as to the division of subjects between the Pharmacopœia and the Codex. Timely action was taken in regard to the use of automatic machines for distributing poisons, though the presidential statement on the subject was far from convincing so far as the use of such machines by chemists for non-poisonous articles is concerned. Inconclusive action was also taken in respect of the conversion of stamped proprietary medicines into brand-name preparations in connection with which advantage is taken of the exemption in favour of "known, admitted and approved remedies." It was recognised that this movement imperilled one of the old-established privileges of chemists and druggists, but such steps as were taken in the name of the Council of the Society in connection with this matter were unproductive of result. The sudden death of Mr. F. Pilkington Sargeant introduced an unprecedented complication into the Council election for the year. There were sixteen candidates on this occasion, including Mr. Sargeant, and as he was among those who received a majority of votes it became necessary to decide whether or not the eighth person on the list should be regarded as having been elected. This question was decided in the affirmative, with the result that the only change on the Council was the election of Mr. W. Deacon, of Bridgwater, as a newcomer in place of Mr. Sargeant. Membership of the Society was shown to be the highest on record, while the financial position was again excellent; but the president, referring to the necessity of making provision for new buildings, intimated that this would probably strain the resources of the Society for some years to come. An extensive purchase of property in Brunswick Square has been completed, and it is understood that a new house for the Society will be erected there in due course. Mr. L. Moreton Parry served for a year as president of the Society, Mr. A. R. Melhuish being elected to succeed him at the next meeting of the Council, with Mr. F. G. Hines as vice-president, and Mr. John Keall as treasurer. At the opening of the new session in October, the inaugural address was delivered by Dr. Arthur W. Hill, C.M.G., F.R.S., Director of the Royal Botanic Gardens, Kew, who took as his subject the relation between botany and pharmacy. On the occasion of the November meeting of the Council a notification was received from the Institute of Chemistry to the effect that it was the intention of the Council of the Institute to take steps in the near future to obtain a supplementary charter, with the object of distinguishing chemists, as represented by the Institute, from pharmacists. In Edinburgh the November meeting of the session was the occasion of an address by Professor Ralph Stockman on some past and present aspects of therapeutics. Unveiling of a memorial plaque to the late Sir William Glyn-Jones was undertaken during Mr. Parry's presidency by the Right Honourable Christopher Addison, M.D., Parliamentary Secretary to the Ministry of Agriculture and Fisheries. A complimentary dinner to Mr. Parry was subsequently held at Liverpool, and a cheque for a substantial amount subscribed by his Merseyside friends was then presented to him as a tribute of esteem. The British Pharmaceutical Conference was held at Cardiff, with Mr. John T. Humphrey in the chair. His address dealt with the province of pharmacy, and represented a marked break-away from the usual type of subject. It was designed to show how extensive is the pharmacist's legitimate province, and what a considerable amount of business which now drifts into other channels might reasonably be diverted to the pharmacist. The province of pharmacy was defined as including everything needed in preventive and curative treatment, in health as well as in disease; all applications of chemistry that come reasonably within the scope of a retail shopkeeper; the possession of knowledge that will enable the

OTHER COUNCIL ACTIVITIES

BRITISH PHARMACEUTICAL CONFERENCE

holders to render special service to medical practitioners and to customers who need something more than the mere handing over of goods purchased. Papers contributed to the science sessions of the Conference were numerous and above the average in importance. A delegates' meeting was held to consider the draft Pharmacy and Poisons Bill, but the time was almost entirely occupied by official speakers in restating the case and urging the desirability of leaving it to the Council to take such action as might be found necessary. Social functions, including several most interesting excursions, were remarkably successful, and great credit is due to the local pharmacists and the ladies associated with them for making such excellent arrangements. As a permanent memorial of a most successful gathering, a handsome ivory gavel was presented to Mr. Humphrey at the Cardiff pharmacists' annual dinner, with a request that he would in due course hand it to the new chairman of the Conference. In Ireland, the two Pharmaceutical Societies have continued to flourish. At the annual meeting of the Pharmaceutical Society of Ireland Mr. Fitzpatrick took the chair as president for the last time, and was able to give a most encouraging account of the progress made during his four years in command. The result of the Council election was that Mr. T. J. Smith was returned in the place of Dr. Walsh, who had not sought re-election. Mr. D. J. Nugent was subsequently elected president, with Dr. Michael Ryan as vice-president and Mr. P. B. Kelly as treasurer. So far the new Pharmacy Bill has not come up for consideration, so that the constitutional position remains unaltered so far as pharmacy in the Irish Free State is concerned. In Northern Ireland, the National Health Insurance Bill has been passed, and the scheme is already in full and satisfactory working order. Mr. S. S. Badger was elected president of the Pharmaceutical Society of Northern Ireland, in succession to Mr. Fred Storey, with Mr. Dundee as vice-president and Mr. Horatio Todd as treasurer. Pharmaceutical trade organisations have all continued to do useful work, the Retail Pharmacists' Union in particular having been actively engaged in efforts to improve the business position of chemists and druggists. It has been successful in negotiating regulations in which the Ministry of Health provides that chemists shall not in future suffer loss through disallowance of articles improperly ordered for insured persons by insurance practitioners; it was able to announce that all chemists' accounts for 1929 would be paid in full, and it is now looking forward to payment in full for 1930, with a reasonable prospect of a bonus in addition. Another benefit which the Union has helped to secure is modification of the restrictions under which industrial methylated spirits may be used by pharmacists for making various preparations. Instead of permission needing to be sought for each separate preparation which it is desired to make and sell, it is now possible to make with the industrial methylated spirits any of the nearly two hundred preparations for which formulas are given in the R.P.U. Formulary. Full details of the new Methylated Spirits Regulations, so far as they affect chemists, have been published in our columns, and we have pointed out that they tend to relax the rigidity of the law in favour of the needs of trade and industry. The Pharmacopœia Commission has issued a general report in which it is made clear that remarkable progress has been made in the direction of revising the Pharmacopœia on satisfactory and up-to-date lines. Later, the Pharmacy Subcommittee of the Commission circulated its first report, which is full of promise and, though of conservative tendency, foreshadows the production of a British Pharmacopœia which will represent a notable advance upon any of its predecessors. The Advisory Committee appointed by the Minister of Health "to consider and report upon questions from time to time referred to it by him as to the definition of drugs or medicines for the purposes of medical benefit under the National Health Insurance Acts" issued two reports which tended to clear the air on the subject of when a drug is not a drug, and what substances should never be regarded as drugs. We commented approvingly upon this outcome of the Committee's labours, and it is gratifying to learn that regulations on the subject since issued are working satisfactorily. An address by Mrs. Irvine at Portsmouth served a useful purpose in showing chemists how National Health Insurance dispensing came to be reserved for chemists, how it is controlled, and what advantage they derive from being the nation's dispensers. Another important contribution to our columns was the thought-provoking article by the late lamented Mr. W. H. Saunders on Empire pharmacy. In this he conveyed some useful points on the subject of reciprocity of qualifications, and pointed out that there is an increasing demand throughout the Empire that the pharmaceutical qualification should be standardised and universal. The place of drugs in dental surgery served as the subject of an address of great practical value by Mr. A. T. Pitts, D.S.O., whose remarks on pyorrhœa, dental caries and dentifrices well merited the attention of our readers. Dr. Herbert Levinstein, as president of the Society of Chemical Industry, delivered a remarkable address which served as a sequel to that of the late Sir William Crookes, in which the latter gave his serious warning of the risk of world-wide food shortage. Dr. Levinstein showed how that warning had been taken to heart and the danger met, but then proceeded to show how our present civilisation may perish unless the world's supplies of wood can be maintained. Professor F. O. Bower devoted his address as president of the British Association to the subject of size and form in plants, developing it on novel lines. Much practically useful information to young pharmacists has been provided by Mr. Ernest C. Cripps in his course of lectures on the business side of pharmacy, including book-keeping, etc. Publication of these lectures in the *C. & D.* has excited much interest, and shown that there is a distinct demand for information of this kind among pharmaceutical students. Fresh light was thrown on the way in which the chemist's exemption in favour of "known, admitted and approved" remedies was brought to the notice of the late Sir William Glyn-Jones in an article by Mr. John Humphrey on "A Centenary Worth Recording." In a later communication Mr. Humphrey provided our readers with a thoughtful analysis of the draft Pharmacy

THE IRISH PHARMACEUTICAL SOCIETIES

PHARMACOPŒIA COMMISSION

USEFUL CONTRIBUTIONS

and Poisons Bill, his object being to make the terms and provisions of the measure clear to all those likely to be affected by legislation on the lines of the draft Bill. Many other useful and instructive articles by expert writers on the respective subjects have found place in our columns, in accordance with the well-established *C. & D.* policy of catering for all tastes in the drug trade and taking care always to be prompt in dealing with fresh matters as they arise.

PROMPT NOTICE

National mark malt products thus received the earliest possible attention, as also did roll-film prices, the British Industries Fair, the new ruling of the Board of Customs and Excise on formula disclosure, the sale of medicated wines by chemists who hold wine licences, the Transvaal judgment on maintenance of prices, the Ideal Homes Exhibition, the report to the League of Nations of the advisory committee on traffic in opium and other dangerous drugs, the Hickman centenary exhibition and the cinchona tercentenary celebration at the Wellcome Historical Medical Museum, the Budget with its disappointments, the Medical and Chemists' Exhibitions, legal proceedings in connection with the use of automatic machines, the proposals of the British Medical Association for a national medical service, the Drug Trade Appeal Fund, the Royal Commission on Licensing, the bankers' manifesto in inter-imperial trade, gift schemes, the Consumers' Council Bill, and innumerable other topics that appeal to one section or another of the pharmaceutical community. Special reference must be made to the celebration of the eightieth birthday of Dr. G. Claridge Druce, F.R.S., to the reopening of the Bridge of Allan spa, to the opening of Calvert's new laboratory at Manchester, to the unveiling of a memorial tablet to the late William Duncan in the Edinburgh Royal Dispensary, to the opening of the Woolley Laboratories at the Victoria University of Manchester, and to the well-merited presentation to Mr. J. H. Franklin, chairman of the British Pharmaceutical Conference, on the completion of fifty years' service with James Woolley, Sons & Co., Ltd. Our annual Special Issue again appealed to the most varied tastes, with illustrations of superlative merit for a weekly publication, and literary matter of first-rate interest. This was the first production of the kind to be prepared in our new premises, to which THE CHEMIST AND DRUGGIST has migrated after more than sixty years at the familiar Cannon Street address. Though the change came as a wrench, custom has already rendered the new offices familiar to us, and we hope to welcome friends there no less frequently than in the days of old. Death has removed some who were accustomed to call upon us, and others with whom we had correspondence from time to time. This sad list must be headed by the name of W. H. Saunders, which is almost as familiar to our readers as the proverbial household word. Mr. Saunders was chairman of the well-known Liverpool company, Ayrton, Saunders & Co., Ltd., and died at Rangoon while on one of his trips abroad. Mr. F. P. Sargeant was a member of the Pharmaceutical Council, had been for many years a successful teacher, and combined the qualifications of pharmaceutical chemist and barrister-at-law. Sir George Watt had a distinguished career in India as Professor of Botany in the University of Calcutta, and produced the famous "Dictionary of the Economic Plants of India"; he was an honorary member of the Pharmaceutical Society of Great Britain, and had been awarded the Hanbury medal. Mrs. F. E. Deacon, who died at the advanced age of ninety-two years, is believed to have been the first woman to qualify as a chemist and druggist. Mr. A. H. Barlow was managing director of Benger's Food, Ltd. Dr. Francis Arnall was a prominent teacher, formerly at Chelsea Polytechnic, and later at Cardiff Technical College, where he met his death as the result of the explosion of a glass tube used in connection with experiments conducted with a view to the results being submitted to the Cardiff Conference. Mr. C. T. Cockburn was managing director of Cockburn & Co., Ltd., of Glasgow. Lieutenant-Colonel Robert Benzie, D.S.O., was formerly in business as a pharmacist in Ceylon. Mr. E. E. Jackson was managing director of Ernest Jackson & Co., Ltd., Crediton. Mr. James Guiler was an Irish pharmacist, in business in Belfast, and a former examiner; he was a man of marked ability, and held in high esteem by his fellow-pharmacists. Mr. R. C. Cowley, who died at Brisbane, was formerly well-known as the principal of the Liverpool School of Pharmacy; he went to Brisbane to become director of the Queensland College of Pharmacy, and was subsequently appointed scientific editor of "The Pharmaceutical Journal of Australasia." Mr. R. C. Wren was a director of Potter & Clarke, Ltd., and the author of a standard work on herbal remedies. Captain J. T. Ainslie Walker was widely known for his orignal work on disinfectants. Mr. E. M. Holmes was one of the best-known personalities in the world of pharmacy; as curator of the Pharmaceutical Society's Museum, president of the British Pharmaceutical Conference, and a tireless worker in botany and materia medica, he had gained an international reputation. Sir Francis Watts, K.C.M.G., D.Sc., was at one time a chemist and druggist, but later occupied several official positions abroad. Dr. Chuni Lal Bose was chairman of the Bengal Chemical and Pharmaceutical Works, Ltd., and interested himself greatly in the chemistry of medicinal plants. Mr. J. F. Harrington was a former president of the Pharmaceutical Society of Great Britain. Mr. Andrew Wilson, of Belfast, was a former member of the Council of the Pharmaceutical Society of Northern Ireland. Lord Brotherton was a chemical manufacturer and an original member of the Society of Chemical Industry. Mr. George S. Davis was one of the founders of Parke, Davis & Co., Detroit, and a moving spirit in the introduction of serums, bacterial vaccines, etc. Alderman Daniel Davison was formerly in business in Cromer, and had contributed to THE CHEMIST AND DRUGGIST some delightful articles on ancient mortars. Mr. K. Y. Gibbs, of D. & W. Gibbs, Ltd., was in all probability the oldest active member of the soap trade, and was held in the highest esteem. Mr. Benjamin John was formerly in business in Bath, of which city he had been Mayor. Mr. William Doig was a wholesale druggist in Belfast and had been a member of the Council of the Pharmaceutical Society of Ireland. Professor Augustin Henry was known best by the remarkable collection of botanical specimens he sent at various times from China and the Far East to Kew Gardens; he was joint author of an important work on the trees of Great Britain and Ireland.

OBITUARY

Pharmacy and Poisons Bill

The following is the text of the Pharmacy and Poisons Bill introduced into the House of Lords on December 17, and briefly referred to in our issue of December 20. Words added to, or materially altered from, the text of the Departmental Committee's draft Bill, given in our issue of March 22 (pp. 359-64) are printed in italic type. Sections 5-7 inclusive of the draft Bill correspond to Sections 5-9 inclusive of the present Bill.

A BILL

INTITULED

An Act to amend the law relating to Pharmacy and Poisons.

BE it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows: —

PART I

PHARMACY

1.—(1) Every person registered as a pharmacist, shall, by virtue of being so registered, be a member of the Pharmaceutical Society of Great Britain (in this Act referred to as " the Society "), and the provisions of the Pharmacy Acts and of the Charter of Incorporation of the Society so far as they provide that persons shall become members of the Society by election shall cease to have effect.

(2) Every member of the Society shall, in addition to the fees payable on registration as a pharmacist, pay such fee (*in this section referred to as " a retention fee "*) as may be prescribed by the by-laws of the Society, but not exceeding two pounds, in respect of the retention of his name on the register in any year subsequent to the year in which he first becomes a member of the Society or, in the case of a person who was a member of the Society immediately before the commencement of this Act, subsequent to the year in which this *section* comes into operation.

Different fees may be prescribed under this subsection as regards different classes of members of the Society, and provision may be made by the by-laws of the Society for exempting any class of the said members from liability to pay a fee under this subsection.

(3) If a person, within one month after the date on which payment has been demanded by the Society in such manner as may be prescribed by the by-laws of the Society, fails to pay any retention fee payable by him, the Council *of the Society* (*in this Act referred to as " the Council "*) may strike his name off the register, but if, either within the year in respect of which the fee is payable or within such longer period as the Council may allow, the person whose name has been so struck off pays to the Society the retention fee, together with such additional sum, if any, by way of penalty for the default as may be prescribed by the by-laws of the Society, his name shall be restored to the register, and, if the Council so direct, the restoration shall have effect as from the date on which his name was struck off.

(4) A person shall, upon ceasing to be registered as a pharmacist, cease to be a member of the Society.

(5) Except in so far as the Council otherwise order, the register of members of the Society and associates and apprentices or students directed to be kept by section five of the Pharmacy Act, 1852, shall cease to be kept, and so much of the Pharmacy Acts as relates to the keeping of the said register and to the granting by the registrar of certificates of inclusion therein, or of membership of the Society, shall cease to have effect.

(6) In this section the expression " year " means a period of twelve months beginning on such date as the Council may from time to time determine.

2.—(1) The Privy Council may nominate three persons to be members of the Council of the Society in addition to the persons appointed as members of the Council under the Charter of Incorporation *of the Society*, and the persons so nominated by the Privy Council shall hold office as members of the Council for such time as the Privy Council may determine.

(2) A person shall be qualified for nomination under this section as a member of the Council whether he is or is not a member of the Society.

3.—(1) Every person who owns a business comprising the retail sale of drugs shall, if he is an authorised seller of poisons, cause the premises where the business is being carried on to be registered under this section.

(2) An application for registration under this section shall be made in such manner as may be prescribed by by-laws made by the Society, and it shall be the duty of the registrar to keep, in accordance with the provisions of by-laws so made, a register for the purposes of this section (in this Act referred to as " the register of premises ") and, on payment of such fee as is *hereinafter provided*, to enter therein all premises in respect of which an application for registration is duly made.

(3) On the first application for registration under this section, there shall be payable such fee, not exceeding three pounds, as may be prescribed by the by-laws of the Society, and the owner of the business carried on in any premises entered in the register shall pay a fee (*in this section referred to as " a retention fee "*) of the same amount in respect of the retention of the premises on the register of premises in any year subsequent to the year in which *the premises were first registered under this section in pursuance of an application made by him.*

(4) If a person, within one month after the date on which payment has been demanded by the Society in such manner as may be prescribed by the by-laws of the Society, fails to pay any retention fee payable by him under this section, the Council may strike the premises off the register of premises, but if either within the year in respect of which the fee is payable or within such longer period as the Council may allow, the owner of the business carried on in the premises pays to the Society the retention fee, together with such additional sum, if any, by way of penalty for the default, as may be prescribed by the by-laws of the Society, the premises shall be restored to the register, and, if the Council so direct, the restoration shall have effect as from the date on which the premises were struck off.

(5) The registration of any premises under this section shall become void on any change in the ownership of the business carried on therein.

(6) *In this section the expression " year " means a period of twelve months beginning on such date as the Council may from time to time determine.*

4.—Section two of the Pharmacy Act, 1852, shall cease to have effect so far as it requires by-laws of the Society to be confirmed and approved by a special general meeting of the Society.

5.—(1) It shall not be lawful for any person unless he is registered as a pharmaceutical chemist to take or use the title of pharmaceutical chemist or pharmaceutist, or for any person unless he is registered as a pharmacist to take or use the title of chemist and druggist, or of druggist or of pharmacist, or to take or use in connection with the sale of goods by retail the title of chemist.

(2) It shall not be lawful for any person to affix to or use in connection with the premises *where he carries on any business* any title or description reasonably

calculated to suggest that he or anyone employed in the business carried on in the premises possesses any qualification with respect to the selling, dispensing or compounding of drugs or poisons other than the qualification which he in fact possesses.

(3) If a person acts in contravention of the foregoing provisions of this section, he shall be liable on summary conviction to a penalty not exceeding twenty pounds, and to a further penalty of five pounds for every day during which the offence continues.

(4) A penalty recovered in proceedings instituted under this section by, or by the direction of, the Society shall, notwithstanding anything contained in any public or other Act, be paid to the Society.

6.—(1) For the purposes of this Act there shall be appointed a Committee of the Society which shall be known as " the Statutory Committee " and which shall be constituted in the manner provided by this section.

(2) The Statutory Committee shall consist of five members, of whom one, who shall be a person having practical legal experience, shall be appointed by the Privy Council, and of whom four shall be persons elected by the Council of the Society.

(3) The member appointed by the Privy Council shall be the chairman of the Statutory Committee, and a person may be appointed a member of the Committee whether he is or is not a member of the Society or of the Council of the Society.

7.—(1) The Statutory Committee may, after making inquiry into the case in accordance with the by-laws of the Society, direct the registrar to remove from the register the name of any pharmacist who—

(*a*) has been convicted of an offence against the Pharmacy Acts; or

(*b*) has been convicted of any other criminal offence, or been guilty of any misconduct which, in the opinion of the Statutory Committee, renders him unfit to be on the register.

(2) The Statutory Committee shall cause notice of any direction given by them under this section to be sent to the person to whom it relates by registered letter addressed to him at his address in the register.

(3) The power of the Council of the Society to remove members from the Society and the power of the Privy Council to direct the removal of names from the register shall cease, but nothing in this section shall affect the provisions of sections ten, eleven and twelve of the Pharmacy Act, 1868, with respect to the erasure from the register of names and entries in the cases to which those sections respectively relate.

8.—(1) If the Statutory Committee think fit in any case so to do, they may, either of their own motion or on the application of the person concerned, direct the registrar to restore to the register, either without fee or on payment of such fee, not exceeding the fee payable on registration as a pharmacist, as may be fixed by the by-laws of the Society, any name or entry which has been removed from the register:

Provided that, where an appeal to the High Court against the removal of any name from the register has not been allowed by the High Court, a direction under this section in respect of that name shall not take effect unless approved by the Privy Council.

(2) Any person aggrieved by the refusal of an application for the restoration to the register of a name or entry may, within a period of three months from the date on which notice of the refusal is given to him, appeal against the refusal to the High Court.

9.—A registered pharmacist carrying on a business which comprises the retail sale of drugs shall be an authorised seller of poisons within the meaning of this Act if the following conditions are complied with—

(*a*) in each set of premises where the business is carried on the business must be bona fide conducted by the pharmacist himself or some other registered pharmacist; and

(*b*) the name and certificate of registration of the person by whom the business is so conducted in any premises must be conspicuously exhibited in those premises.

10.—(1) Subject to the provisions of this section, a body corporate carrying on a business which comprises the retail sale of drugs shall be an authorised seller of poisons within the meaning of this Act if the following conditions are complied with—

(*a*) the business must, so far as it relates to the keeping, retailing, dispensing and compounding of poisons, be under the control and management of a superintendent in whose case the following requirements are fulfilled:

(i) he must be a registered pharmacist;

(ii) his name must have been forwarded to the registrar to be entered by him in a register to be kept for that purpose;

(iii) he must not be acting at the time in a similar capacity for any other body corporate; and

(*b*) in each set of premises where the business is carried on, the business must, if not personally conducted by the superintendent, be bona fide conducted under the direction of the superintendent by a manager or assistant who is a registered pharmacist; and

(*c*) where the business is personally conducted in any premises by the superintendent, his certificate of registration must be conspicuously exhibited in those premises, and, where the business is conducted in any premises by a manager or assistant, his certificate of registration must be conspicuously exhibited in those premises.

(2) Notwithstanding anything in section five of this Act a body corporate which is an authorised seller of poisons may, if the superintendent is a member of the board of directors or other governing body of the body corporate, use the description of chemist and druggist, or of chemist, or of druggist, or of dispensing chemist or dispensing druggist, and the premises on which the business is carried on may be described as a pharmacy.

(3) If—

(*a*) a body corporate which is an authorised seller of poisons has been convicted of an offence against the Pharmacy Acts: or

(*b*) any director or officer of or other person in the employment of that body—

(i) has been convicted of an offence against the Pharmacy Acts; or

(ii) has been convicted of any other criminal offence, or been guilty of any misconduct, which, in the opinion of the Statutory Committee, renders him, or would if he were a registered pharmacist render him, unfit to be on the register,

the Statutory Committee may inquire into the case in accordance with the by-laws of the Society and may, unless the body corporate satisfies them that the act or omission *which was the ground of the conviction or which constituted the misconduct* was not instigated or connived at by any of their directors or by their superintendent or any other of their officers, direct—

(i) that the body corporate shall cease to be an authorised seller of poisons and shall cease to be entitled to use any title or description which a body corporate being an authorised seller of poisons is entitled to use;

(ii) that any or all of the premises of the body corporate shall be removed from the register of premises and be disqualified, for such period as may be specified in the direction, from being registered therein.

(4) The Statutory Committee shall cause notice of any direction given by them under this section to be served on the body corporate to which it relates.

11.—(1) Subject to the provisions of this section, if a registered pharmacist dies while carrying on a business which comprises the retail sale of drugs, any executor, administrator or trustee of his estate who carries on the business after his death in accordance with the conditions hereinafter mentioned shall, during the period mentioned in subsection (2) of this section, be an authorised seller of poisons within the meaning of this Act and be entitled to use in connection with the business such titles and descriptions as might have been used by the deceased pharmacist.

The said conditions are as follows, that is to say—

(*a*) in each set of premises where the business is carried on, the business must be bona fide conducted by a registered pharmacist; and

(*b*) the name and certificate of registration of the person by whom the business is so conducted in any

premises must be conspicuously exhibited in those premises.

(2) The period during which an executor, administrator or trustee shall be entitled as aforesaid shall be a period not exceeding five years from the date of the death of deceased pharmacist or such longer period as, on the application of the executor, administrator or trustee the Statutory Committee may, having regard to all the circumstances of the case, think fit to direct.

(3) If any such executor, administrator or trustee or any person in his employment—

(*a*) has been convicted of an offence against the Pharmacy Acts; or

(*b*) has been convicted of any other criminal offence, or been guilty of any misconduct which, in the opinion of the Statutory Committee, renders him, or would if he were a registered pharmacist render him, unfit to be on the register,

the Statutory Committee may inquire into the case in accordance with the by-laws of the Society, and may, unless in the case of an act or omission by a person in his employment the executor, administrator or trustee satisfies them that the act or omission *which was the ground of the conviction or which constituted the misconduct* was not connived at or instigated by him, direct that he shall cease to be an authorised seller of poisons and cease to be entitled to use in connection with the business the titles and descriptions which might have been used by the deceased pharmacist.

(4) The Statutory Committee shall cause notice of any direction given by them under this section to be sent to the executor, administrator or trustee by registered letter addressed to him at any one of the premises where the business of the deceased pharmacist is being carried on.

12.—(1) A direction given by the Statutory Committee under this Part of this Act, *other than a direction for the restoration to the register of a name or entry*, shall not take effect until the expiration of a period of three months from the date on which notice thereof is duly given to or served on the person to whom it relates, or, in a case where an appeal has been brought against the direction, until the appeal is determined or withdrawn.

(2) Any person aggrieved by any such direction may, at any time within three months from the date on which notice of the direction is given to or served on him, appeal against the direction to the High Court.

(3) On an appeal under this Part of this Act the High Court may give such directions in the matter as they think proper, including directions as to the costs of the appeal, and the order of the High Court shall be final.

(4) Where a direction given by the Statutory Committee under this Part of this Act *has taken effect* or an order has been made by the High Court under this Part of this Act on an appeal against any such direction *or against the refusal of an application for the restoration to the register of a name or entry*, it shall be the duty of the registrar to make such alterations in the register or the register of premises as are necessary to give effect to the direction or order.

PART II

POISONS

13. As from the appointed day the provisions of the Arsenic Act, 1851, and the provisions of the Pharmacy Acts relating to the sale and supply of poisons and poisonous substances shall cease to have effect and in lieu thereof the following provisions of this Part of this Act shall have effect.

14.—(1) For the purposes of this Act, there shall be an Advisory Committee, which shall be called, and is in this Act referred to as, "the Poisons Board."

(2) The Poisons Board shall be constituted in manner provided by the First Schedule to this Act.

(3) The procedure of the Poisons Board shall (subject to any regulations made by the Board with the approval of the Secretary of State) be such as the Board may determine.

15.—(1) The Secretary of State shall as soon as may be after the passing of this Act cause the Poisons Board to prepare and submit to him for his approval a list of the substances which are to be treated as poisons for the purposes of this Act.

(2) The list to be prepared under this section shall be divided into two parts as follows:—

Part I of the list shall consist of those poisons which, subject to the provisions of this Part of this Act, are not to be sold except by persons who are authorised sellers of poisons, and

Part II of the list shall consist of those poisons which, subject to the provisions of this Part of this Act, are not to be sold except by persons *who are authorised sellers of poisons* or by persons entitled by virtue of section eighteen of this Act to sell poisons included in the said Part II.

(3) The Secretary of State shall forthwith take into consideration the list submitted to him by the Poisons Board, and may by order confirm it with or without modifications, as he thinks proper.

(4) The Secretary of State may from time to time, after consultation with or on the recommendation of the Poisons Board, by order amend or vary the said list as he thinks proper.

(5) The said list as confirmed, or as amended or varied from time to time, as the case may be, in pursuance of this section, shall have effect as if enacted in this Act.

(6) The said list as in force for the time being is in this Act referred to as "the Poisons List."

16.—(1) Subject to the provisions of this Part of this Act, it shall not be lawful—

(*a*) for any person to sell any poison included in Part I of the Poisons List, unless—

(i) that person is an authorised seller of poisons; and

(ii) the sale is effected by, or under the supervision of, a registered pharmacist; *and*

(*iii*) *the sale is effected on premises duly registered under Part I of this Act;*

(*b*) for any person to sell any poison included in Part II of the Poisons List, unless either—

(i) that person is an authorised seller of poisons *and the sale is effected on premises duly registered under Part I of this Act;* or

(ii) that person is a person entitled by virtue of section eighteen of this Act of the Poisons List and the sale is effected on the premises specified in the list kept under the said section as premises on which that person is entitled to sell such poisons:

(*c*) for any person to sell any poison unless the container of the poison is labelled in the prescribed manner—

(i) with the name of the poison; and

(ii) in the case of a preparation which contains a poison as one of the ingredients thereof, with the prescribed particulars as to the proportion which the poison contained in the preparation bears to the total ingredients; and

(iii) with the word "poison" or other prescribed indication of the character of the article; and

(iv) with the name and address of the seller of the poison.

(2) Subject to the provisions of this Part of this Act—

(*a*) it shall not be lawful to sell any poison included in Part I of the Poisons List to any person unless that person is either—

(i) certified in writing in the prescribed manner and by a person authorised by rules under this Act to give a certificate for the purposes of this section; or

(ii) known by the seller or by some registered pharmacist in the employment of the seller at the premises where the sale takes place,

to be a person to whom the poison may properly be sold:

(*b*) the seller of any such poison shall not deliver it until—

(i) he has made or caused to be made an entry in a book to be kept for that purpose stating, in the prescribed form, the date of the sale, the name and address of the purchaser and of the person, if any, by whom the certificate required under paragraph (*a*) of this subsection was given, the name and quantity of the article sold, and the purposes for which it is stated by the purchaser to be required; and

(ii) the purchaser has affixed his signature to the entry aforesaid.

(3) Nothing in this section shall apply—

(*a*) to a medicine which is supplied by a duly qualified medical practitioner for the purposes of medical treatment, by a registered dentist for the purposes of dental treatment or by a registered veterinary surgeon for the purposes of animal treatment; or

(*b*) to a medicine which is dispensed by an authorised seller of poisons *on premises duly registered under Part I of this Act;* or

(*c*) to a poison forming part of the ingredients of a medicine which is supplied by an authorised seller of poisons *on premises duly registered under Part I of this Act;*

if the following requirements are satisfied in relation thereto:—

(i) The medicine must be distinctly labelled with the name and address of the person by whom it is supplied or dispensed; and

(ii) The following particulars must be entered by the person supplying or dispensing the medicine in a book which is used *regularly* for the purpose of this provision *but which need not be used exclusively for that purpose*—

(*a*) the date on which the medicine was supplied or dispensed;

(*b*) the ingredients of the medicine;

(*c*) if the medicine was dispensed, the name or initials and, if it is known, the address of the person by whom, and the name and, if it is known, the address of the person to whom, and the date on which, the prescription was given;

(*d*) if the medicine was not dispensed, the name of the person to whom it was supplied; and

(iii) In the case of a medicine which is supplied or dispensed by a person who is an authorised seller of poisons and is compounded by the person supplying or dispensing it or by a person in his employment, the medicine must have been compounded by or under the direct supervision of a registered pharmacist; and

(iv) In the case of a medicine which is supplied or dispensed by a person who is an authorised seller of poisons, the supplying or dispensing of the medicine must be effected by or under the direct supervision of a registered pharmacist:

Provided that the foregoing requirement (ii) need not be satisfied in the case of a medicine which is supplied on and in accordance with a written prescription given by a duly qualified medical practitioner under and in accordance with the provisions of the Acts relating to national health insurance.

(4) For the purposes of this Act, if the sale or supply of a poison is effected by an employee on behalf of his employer, the poison shall be deemed to have been sold or supplied by the employer.

17.—Except as provided by rules under this Act, nothing in the foregoing provisions of this Part of this Act shall extend to or interfere with—

(1) the sale of poisons by way of wholesale dealing; or

(2) the sale of poisons to be exported to purchasers outside the United Kingdom; or

(3) the sale of an article for use in or in connection with any hospital, infirmary, dispensary or similar institution approved by an order, whether general or special, of the Secretary of State; or

(4) the sale of an article to—

(*a*) a person who requires the article—

(i) for the purpose of his trade, business or profession; or

(ii) for the purpose of enabling him to comply with any requirements made by or in pursuance of any enactment with respect to the medical treatment of persons employed by that person in any trade or business carried on by him; or

(*b*) a Government department or an officer of the Crown *requiring the article for the purposes of the public service,* or any local authority (*whether a local authority as defined in this Act or not*) requiring the article in connection with the exercise by the authority of any statutory powers; or

(*c*) a person or institution engaged in scientific education or research, if the article is required for the purposes of that education or research.

18.—(1) Every local authority shall keep for the purposes of this Part of this Act a list of persons who, not being entitled to sell poisons included in Part I of the Poisons List, are entitled to sell poisons included in Part II of the Poisons List, and shall, *on payment of such fee as is hereinafter provided,* enter in the list the name of any person who, having a place of business in the area of the authority, makes an application in writing to the local authority in the prescribed form to have his name entered in the list as a seller of such poisons:

Provided that the local authority may refuse to enter in, or may remove from, the list the name of any person who in the opinion of the authority is, for any sufficient reason relating either to him personally or to his premises, not fit to be on the list.

(2) If any person is aggrieved by the refusal of the local authority to enter his name in the said list or by the removal of his name therefrom under this section, he may, in accordance with rules made by the Secretary of State, appeal against the refusal or removal to the court of quarter sessions for the county or borough in which his place of business is situate.

(3) Every list kept under this section shall include particulars of the premises on which the person whose name is entered in the list is entitled to sell the said poisons, and subject as aforesaid the said list shall be in the prescribed form.

(4) Every person shall pay to the local authority the prescribed fees in respect of—

(*a*) the entry of his name in the list; and

(*b*) the making of any alteration in the list in relation to the premises on which he is entitled to sell; and

(*c*) the retention of his name on the list in any year subsequent to the year in which his name is first entered in the list.

(5) If any person whose name is on the said list is convicted before any court of an offence against the Pharmacy Acts or of any *other* criminal offence which, in the opinion of the court, renders him unfit to have his name on the list, the court may, as part of the sentence, order his name to be removed from the list and direct that he shall, for such period as may be specified in the order, be disqualified for having his name on any list kept under this section.

(6) In this section—

The expression "relating to him personally" means, in relation to a person being a body corporate, relating to the personal characteristics of the directors, managers or other officers of, or the persons controlling, the body corporate:

The expression "year" means a period of twelve months beginning on such date as the local authority may from time to time determine.

(7) It shall not be lawful for any person whose name is entered in a list kept under this section to take or use, or affix to, or use in connection with his premises any title or description reasonably calculated to suggest that he is entitled to sell any poison other than a poison contained in Part II of the Poisons List, and if any person acts in contravention of this subsection he shall, in respect of each offence, be liable on summary conviction to a penalty not exceeding five pounds, *and in the case of a continuing offence to a further penalty of one pound for each day during which the offence continues.*

PART III

MISCELLANEOUS

19.—(1) The Secretary of State may, after consultation with or on the recommendation of the Poisons Board, make rules with respect to any of the following matters or for any of the following purposes:

(*a*) the manufacture of pharmaceutical preparations containing poisons:

(*b*) the sale, whether wholesale or retail, or the supply of poisons, by or to any persons or classes of persons (including persons entitled by virtue of section eighteen of this Act to sell poisons included in Part II of the Poisons List) and in particular—

(i) for prohibiting the sale by retail of poisons (being poisons included in Part I of the Poisons List) except on a prescription duly given by a duly qualified medical

practitioner, registered dentist or registered veterinary surgeon, and for prescribing the form and regulating the use of prescriptions given for the purpose of rules made under this paragraph; and

(ii) for dispensing with or relaxing with respect to poisons any of the provisions contained in Part II of this Act relating to the sale of poisons:

(*c*) the storage, transport and labelling of poisons:

(*d*) the containers in which poisons may be sold or supplied:

(*e*) *the addition to poisons of specified ingredients for the purpose of rendering them readily distinguishable as poisons*:

(*f*) the compounding and dispensing of poisons:

(*g*) the period for which any books required to be kept for the purposes of Part II of this Act are to be preserved:

(*h*) the period for which any certificate given under Part II of this Act is to remain in force:

(*i*) for requiring persons in control of the manufacture of pharmaceutical preparations containing poisons to be registered pharmacists or persons possessing the prescribed qualification in chemistry.

(2) *The power to make rules under this section with respect to poisons includes the power to make rules with respect to any class of poisons or any particular poison.*

20.—(1) Any person who acts in contravention of or fails to comply with any of the provisions of Part II of this Act (*other than subsection* (7) *of section eighteen of this Act*), or any rules made under this Part of this Act shall, on summary conviction, be liable in respect of each offence to a penalty not exceeding fifty pounds.

(2) In the case of proceedings against any person under this section for or in connection with the sale or supply of a poison effected by an employee—

(*a*) it shall not be a defence that the employee acted without the authority or against the orders of the employer; and

(*b*) any material fact known to the employee shall be deemed to have been known to the employer.

(3) Notwithstanding any provision in any Act prescribing the period within which summary proceedings may be commenced, proceedings for an offence under this Act may be commenced at any time within the period of twelve months next after the date of the commission of the offence or, in the case of proceedings instituted by, or by the direction of, the Secretary of State, *either within the period aforesaid or* within the period of three months next after the date on which evidence sufficient in the opinion of the Secretary of State to justify a prosecution for the offence comes to his knowledge, whichever period ends on the later date.

For the purposes of this subsection, a certificate purporting to be signed by the Secretary of State as to the date on which such evidence as aforesaid came to his knowledge shall be conclusive evidence thereof.

(4) Any penalty recovered in proceedings instituted under this section by, or by the direction of, the Society shall, notwithstanding anything contained in any public or other Act, be paid to the Society.

21.—(1) It shall be the duty of the Society, by means of inspection and otherwise, to take all reasonable steps to enforce the provisions of Part I of this Act and to secure compliance by registered pharmacists with the provisions of Part II of this Act, and of the rules made under this Part of this Act, and the Society shall for that purpose appoint such number of inspectors as the Privy Council may direct.

(2) A person shall not be qualified for appointment by the Society as inspector under this section unless he is a registered pharmacist, and every such appointment shall be subject to the approval of the Privy Council.

(3) A person appointed by the Society as inspector under this section shall hold his office subject to such conditions with respect to salary and otherwise as the Council of the Society may with the approval of the Privy Council determine.

(4) An inspector appointed by the Society under this section shall, for the purpose of enforcing the provisions of Part I of this Act and for securing compliance by registered pharmacists with the provisions of Part II of this Act and of the rules made under this Part of this Act, have power at all reasonable times to enter any premises which are on the register of premises and shall, for the purpose of preventing the sale of poisons included in Part I of the Poisons List by persons other than authorised sellers of poisons, have power to enter any premises in which he has reasonable cause to suspect that a breach of the law has been committed in respect of the sale of any such poisons, and in either case shall have power to make such examination and inquiry and to do such other things (including the taking, on payment therefor, of samples) as may be necessary for ascertaining whether the provisions aforesaid are being complied with.

(5) It shall be the duty of every local authority to make adequate arrangements for the inspection, either by persons appointed by the authority to act as inspectors for the purposes of this subsection or by persons who are inspectors appointed by the Society under this section, of the premises of persons entitled by virtue of section eighteen of this Act to sell poisons included in Part II of the Poisons List, and any inspector so appointed shall, for the purpose of enforcing compliance by such persons as aforesaid with the provisions of Part II of this Act and the rules made under this Part of this Act, have power at all reasonable times to enter any premises where any such person carries on business and to make such examination and inquiry and do such other things (*including the taking, on payment therefor, of samples*) as may be necessary for the purpose aforesaid.

(6) If any person wilfully delays or obstructs an inspector in the exercise of any powers under this section, or refuses to allow any sample to be taken in accordance with the provisions of this section, or fails to give any information which he is duly required under this section to give, he shall in respect of each offence be liable on summary conviction to a penalty not exceeding five pounds.

22. All orders and rules made by the Secretary of State under this Act shall be laid before each House of Parliament for a period of thirty days during the Session of Parliament, and, if an Address is presented to His Majesty by either House of Parliament before the expiration of that period, praying that the order or rule may be annulled, it shall thenceforth be void, but without prejudice to the validity of anything previously done thereunder or to the making of any new order or rule.

23. Any expenses incurred by a local authority under this Act shall be defrayed, in the case of the council of a county, as general county expenses, and, in the case of the council of a county borough, out of the general rate fund.

24. In this Act, unless the context otherwise requires, the following expressions have the meanings hereby respectively assigned to them, that is to say:—

"Authorised seller of poisons" means any of the persons declared by section nine, section ten and section eleven respectively of this Act to be authorised sellers of poisons within the meaning of this Act:

"Dispensing" means supplying a poison on and in accordance with a prescription duly given by a duly qualified medical practitioner, a registered dentist or a registered veterinary surgeon:

"*Local authority*" *means as respects a county the council of the county and as respects a county borough the council of the borough:*

"Pharmacist" means a pharmaceutical chemist or a chemist and druggist:

"Pharmacy Acts" means the Pharmacy Act, 1852, the Pharmacy Act, 1868, the Pharmacy Acts Amendment Act, 1898, the Poisons and Pharmacy Act, 1908, sections three and four, and so far as it relates to poisons, section five of the Dangerous Drugs and Poisons (Amendment) Act, 1923, and this Act, and a reference to this Act includes a reference to rules made under Part III of this Act:

"Prescribed" means prescribed by rules made under this Act:

"Register" means the register of pharmaceutical chemists or the register of chemists and druggists, and "registered" in relation to a pharmacist means duly registered in the register:

"Registered" in relation to a veterinary surgeon means registered in pursuance of the Veterinary Surgeons Act, 1881, either in the register of veterinary surgeons or in the register of existing practitioners:

"Registrar" means the registrar appointed under section four of the Pharmacy Act, 1852:

"Sale by way of wholesale dealing" means sale to a person who buys for the purpose of selling again.

25. This Act in its application to Scotland shall be subject to the following modifications:—

(*a*) references to the High Court shall be construed as references to the Court of Session;

(*b*) references to proceedings taken by, or by the direction of, the Society shall not apply;

(*c*) references to a body corporate shall be deemed to include references to a firm, *and in the application to a firm of any provision regarding a body corporate a reference to a director shall be construed as a reference to a partner;*

(*d*) the expression "local authority" shall mean, as respects a county, the council of the county, and as respects a large burgh within the meaning of the Local Government (Scotland) Act, 1929, the town council, and all other burghs shall for the purposes of the said sections be deemed to be within the county;

(*e*) any expenses incurred by a county or town council under this Act shall be defrayed out of such rate payable by owners and occupiers in equal proportions as the council may determine;

(*f*) the expression "court of quarter sessions" in section eighteen shall mean the sheriff, and the reference in that section to rules made by the Secretary of State shall not apply;

(*g*) references in section twenty to the Secretary of State shall be construed as references to the Lord Advocate.

26.—(1) This Act may be cited as the Pharmacy and Poisons Act, 1931, and the Pharmacy Acts and this Act may be cited together as the Pharmacy and Poisons Acts, 1852 to 1931.

(2) This Act shall come into operation on the appointed day, and the appointed day shall be such day as His Majesty may by Order in Council appoint, and different days may be appointed for different purposes and for different provisions of this Act.

(3) This Act does not extend to Northern Ireland.

(4) The enactments mentioned in the Second Schedule to this Act are hereby repealed to the extent specified in the third column of that Schedule.

SCHEDULES

FIRST SCHEDULE

CONSTITUTION OF POISONS BOARD

1. The Board shall consist of fourteen members:

Provided that the Secretary of State may from time to time if he thinks fit appoint additional members of the Board, not exceeding four in all.

2. The Board shall be composed of the following persons, namely:—

One person appointed by the Secretary of State for the Home Department;

One person appointed by the Secretary of State for Scotland;

Two persons appointed by the Minister for Health;

One person appointed by the Minister of Agriculture and Fisheries;

The person who is for the time being the Government Chemist or in his absence a member of his staff appointed by him;

Five persons appointed by the Pharmaceutical Society of Great Britain, of whom one shall be a person engaged in the manufacture for sale by way of wholesale dealing of pharmaceutical preparations;

One person appointed by the Royal College of Physicians of London;

One person appointed by the Royal College of Physicians of Edinburgh;

One person appointed by the General Medical Council;

Two additional members, if any, appointed by the Secretary of State.

3. Such member of the Board as the Secretary of State may appoint shall be the Chairman.

4. The appointed members of the Board shall hold office for a term of three years.

5. If the place of an appointed member of the Board becomes vacant before the expiration of his term of office, whether by death, resignation or otherwise, the vacancy shall be filled by appointment by the body or person by whom the vacating member was appointed, and any person appointed to fill a casual vacancy shall hold office so long only as the member to whose place he was appointed would have held office.

6. Any appointed member ceasing to be a member of the Board shall be eligible for re-appointment.

7. The powers of the Board may be exercised notwithstanding any vacancy in their number.

SECOND SCHEDULE

ENACTMENTS REPEALED

Session and Chapter	Short Title	Extent of Repeal
14 & 15 Vict. c. 13.	The Arsenic Act, 1851	The whole Act.
15 & 16 Vict. c. 56.	The Pharmacy Act, 1852	In section two, the words "by a Special General Meeting of the Members of the said Pharmaceutical Society, and" In section ten, the words "and every such person duly registered as a pharmaceutical chemist shall be eligible to be elected as a member of the said Society." Sections twelve, thirteen, and fourteen.
31 & 32 Vict. c. 121.	The Pharmacy Act, 1868	Sections one, two, fifteen, sixteen, seventeen and twenty-six, and Schedule F.
32 & 33 Vict. c. 117.	The Pharmacy Act, 1869	The whole Act.
61 & 62 Vict. c. 25.	The Pharmacy Acts (Amendment) Act, 1898	Section three.
8 Edw. 7. c. 55.	The Poisons and Pharmacy Act, 1908	Sections one, two, three, five and seven, and the Schedule.
13 & 14 Geo. 5. c. 5.	The Dangerous Drugs and Poisons (Amendment) Act, 1923	Sections three and four, and in section five the words "of the Schedule to the "Poisons and Pharmacy "Act, 1908 and."

New Books

Beeching, C. L. T.—*The Retail Shop.* 6½ in. + 4¼ in. Pp. 64. 1s. Pitman & Sons, Ltd., Parker Street, Kingsway, London, W.C.2. [Pitman's Business Library would be incomplete without this latest addition, which, despite its small size, contains much useful information on shop management.]

Bell's Sale of Food and Drugs. Eighth edition, edited by R. A. Robinson. 8½ in. by 5½ in. Pp. xxvi + 299 + 34. 15s. Butterworth & Co. (Publishers), Ltd., Bell Yard, Temple Bar, London, W.C.2. [Mr. R. A. Robinson, chief officer, Public Control Department of the Middlesex County Council, who is well known to readers of THE CHEMIST AND DRUGGIST, has taken in hand this standard work, originally published in 1886, with excellent results. The arrangement of the book is helpful in that the relevant statutes or parts of statutes (with notes) are printed first; Regulations and Orders follow; and the rest of the manual comprises two appendices containing useful comments on specific points not dealt with earlier in the volume. The considerable increase in legislation affecting the sale of food in recent years must have made the compilation of this edition a formidable task; but the author has the satisfaction of knowing that nothing of any importance relating to this subject has been omitted. The volume may thus be commended, not only to those who are constantly in touch with the administration of the law relating to the vending of food and drugs, but also to the wide circle of people in wholesale or retail business who desire to be well informed concerning a very important matter.]

Legal Reports

Breach of Injunction.—In the Chancery Division of the High Court, London, on December 18, Mr. Justice Bennett made an order on a motion (*C. & D.*, November 29, p. 670) to commit Mr. J. Murphy, formerly of Belvedere Crescent, S.E., for breach of an injunction granted by Mr. Justice Eve in 1923 restraining the defendant from passing off perfume as Ashes of Roses manufactured by Paul Lehmann Wertheimer and Pierre Jules Wertheimer, trading as A. Bourjois et Cie, perfumers, Paris. A witness named Cummings, and two other witnesses who serve at a stall in Woolwich Market, gave evidence of the purchase of a gross of bottles from the defendant. The defendant, in the witness-box, said that while the scents and bottles supplied about this time were various, they did not include any of the bottles in question, which, he suggested, must have reached Cummings in a job lot from some other quarter. Giving judgment, his lordship said that Cummings swore he bought a gross of bottles of perfume from the defendant on May 31 last for 24s., including the exhibits in this case. The defendant said he had not sold any perfume under the name Ashes of Roses since 1923. His lordship decided that Murphy sold these bottles on May 31. He could have no reasonable doubt of it. He regarded the violation of the injunction as flagrant, and ordered that Murphy be committed to Brixton Prison for his contempt of court and be ordered to pay the costs of the motion.

Injunction Refused.—In Durham Chancery Court, on December 19, Mr. Caleb B. Henderson (C. B. Henderson, Ltd., chemists, Trimdon) applied for an injunction to restrain Mr. Thomas L. Scott, chemist and druggist, East Boldon, from soliciting customers of the Trimdon business of which the defendant was formerly proprietor. Dr. Charlesworth, for the plaintiff, said that Mr. Henderson was at one time employed as an assistant by Mr. Scott. He left his employment to join the Army, and subsequently returned to Trimdon and there started in business on his own account. In February 1928 Mr. Scott's business was advertised for sale, and Mr. Henderson purchased it on the understanding that Mr. Scott was retiring and was going to live in the South. The sum of £1,100 was paid for the business. One solicitor acted for both parties, and Mr. Henderson trusted Mr. Scott implicitly, the latter being well known in the district and a local preacher, and generally regarded as a man of integrity. The plaintiff did not think of inserting a clause in the agreement prohibiting Mr. Scott from starting in business in the district in opposition. Mr. Scott drew up and issued a circular in which he explained to his old customers that owing to continued ill health he had decided to retire. Some time afterwards the plaintiff discovered that the defendant, instead of going South, had gone to East Boldon, and was in the habit of visiting Trimdon regularly and supplying medicines to certain families who had been customers of the business. The Chancellor: How are you going to prove solicitation in this case? Dr. Charlesworth said that would be difficult, as the evidence was rather thin on that point. The Chancellor: How are you going to put the case for misrepresentation? Dr. Charlesworth: There is Scott's announcement that he was retiring from business and was going South. Counsel added that in July 1929 Mr. Henderson obtained an interlocutory injunction against Mr. Scott. Mr. Henderson, in the witness-box, said he told the solicitor that the turnover of the business was so small as to cause him surprise. The business in the first year showed a loss of £212. Mr. D. A. S. Cairns, for the defence, submitted that there was no case to answer. The misrepresentation which had been alleged was no more than the expression of an intention to live in the South of England. Mr. Scott supplied medicines to two or three of the customers of the business who were his personal friends, but he made no solicitation, and there was not a suggestion of evidence that he had done so. The Chancellor said that the evidence did not go very far towards establishing misrepresentation, and gave judgment for the defendant, with costs.

New Companies

and Company News

P.C. means Private Company and R.O. Registered Office.

EDWARD HAIGH, LTD. (P.C.). — Capital £3,000. Objects: To acquire the business of a veterinary chemist carried on by J. S. White, at Bedford. R.O.: 25 Foster Hill Road, Bedford.

STARCH IMPORTERS, LTD. (P.C.).—Capital £100. Objects: To carry on the business of merchants, importers and exporters, buyers and sellers of farina, dextrine, starch, etc. Solicitors: H. Smith, 60 Mark Lane, London, E.C.3.

NICOLETTE, LTD. (P.C.).—Capital £100. Objects: To carry on the business of manufacturers, exporters and importers of and dealers in soaps, perfumes and toilet articles and requisites, etc. Solicitors: Coburn & Co., 6 Drapers Gardens, London, E.C.2.

BURBIDGE, COPE & WORGER, LTD. (P.C.).—Capital £2,000. Objects: To acquire the business of manufacturers of detergent liquids carried on at 26 Surrey Street. London, S.E.15, as "Doby," together with all or any of the assets of the proprietor. R.O.: Audrey House, Ely Place, E.C.1.

G. B. KENT & SONS, LTD., have declared the usual dividend at the rate of 5½ per cent. per annum upon the cumulative participating preference shares for the six months ended September 30, 1930.

SOLIDOL CHEMICAL.—The net profit for the thirteen months to September 30 was £276 (against £6,832 for initial period May 7, 1928, to August 31, 1929). After crediting £3,250 brought in and deducting the preference dividend paid October 1, 1929, there is a surplus of £2,634 carried forward.

YEAST-VITE, LTD.—The directors announce that the trading to November 30 last makes it clear that the profit for the year ending December 31 will be approximately the same as for the previous year. It is, therefore, their intention to pay dividends on the preferred ordinary of 6 per cent., making 11 per cent. for the year, and on the deferred 10 per cent., making 15 per cent. These are at the same rates as for the previous twelve months.

JOSEPH NATHAN & CO., LTD. (proprietors of Glaxo) state that preliminary information indicates that the accounts for the year ended September 30 will show a net profit, subject to audit, of £68,037, compared with £65,377 last year. At the annual meeting the directors will recommend payment of the usual dividend on the eight per cent. preferred ordinary shares, and also a dividend of 10 per cent. on the ordinary shares. The last dividend on the ordinary shares was 8 per cent. for 1921-22.

TAYLORS DRUG CO., LTD.—For the year ended October 4 last the net profit amounted to £35,174 (against £57,302 for the preceding accounting period of fifteen months). Preference share dividends take £15,920. With the final payment of 5 per cent. now proposed, the total dividend on the ordinary shares (which are held by Taylors (Cash Chemists) Trust), is 11 per cent., free of tax (against 12½ per cent., free of tax). The carry-forward is reduced from £36,974 to £23,228. It is pointed out that the whole of the company's shops are situated in the North of England, which has felt the present trade depression more than any district in the country.

Gazette

Bankruptcy Acts

RECEIVING ORDER AND ADJUDICATION

WARD, H. B., 572 Hessle Road and 7 Porter Street, Kingston-upon-Hull, chemist.

Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling, packing, etc. Qualities of chemicals, drugs, essential and fixed oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

28 Essex Street, W.C.2, December 23

London Markets

DURING the short interval which has elapsed since our last report, the demand has been chiefly confined to urgent requirements, and has involved few price-changes. The Mincing Lane produce markets will be closed from Wednesday evening and re-open Monday morning, and as stocktaking operations follow on the vacation, there will be little of interest until the turn of the New Year. It may be said that the year just closing will undoubtedly prove to many one of the worst experienced since the war. During the whole of the year, values have in most instances consistently fallen, and from causes many and varied. The flood of depreciation in values seems to have covered the whole commercial world. Many and often have been the times when holders of one commodity have tried to realise their stocks to enable them to meet losses, or to hold their position in other directions. Buyers of their requirements of articles to cover a certain period cannot be blamed when they find their costs are high—causes which they could not possibly foresee, have put their reckoning out. New methods of cultivation, manufacture and new sources of supply have given us this year a superabundance of commodities which we are not able to consume. The only change of importance in pharmaceutical chemicals is a further revision of prices for aspirin, the latest move being a reduction of twopence per lb. for home trade; export prices to the Dominions and British Possessions have also been reduced; export prices to other destinations are, so far, unchanged, but will probably be dealt with in due course. Home trade prices are now:—10 cwt., 2s. 7d.; 5 cwt. 2s. 8d.; 1 cwt., 2s. 8½d.; 28 lb., 2s. 9d.; 14 lb., 2s. 9d.; 7 lb., 3s.; 1 lb., 3s. 4d. per lb.; export prices to British Possessions and Dominions have also been revised, as follows:—10 cwt., 2s. 7d.; 5 cwt., 2s. 8d.; 1 cwt., 2s. 3½d.; less than 1 cwt., 2s. 9d. per lb., f.o.b. export prices to other destinations have not yet been revised. There is nothing to report in CITRIC ACID; the market has remained sluggish with spot prices for foreign about 1s. 1⅞d. to 1s. 2⅛d. per lb., less 5 per cent. CREAM OF TARTAR is about unchanged on a dull market; foreign, on spot, about 87s. to 88s. per cwt., less 2½ per cent., as to quantity. There is a fair business moving in HEXAMINE at keen prices in the region of 1s. 10d. to 1s. 11d. per lb., as to quantity. PHENACETIN and PHENAZONE are meeting with quite a good inquiry, especially the former, and prices obtained are now well up to the Convention rates of 3s. 8d. to 3s. 10½d. and 6s. 11d. to 7s. 3½d. per lb., respectively, with powder 1½d. per lb. more PHENOLPHTHALEIN is being badly cut in some quarters, and the Convention rates of 5s. 11d. to 6s. 1½d. per lb., as to quantity, are practically nominal. The market for TARTARIC ACID has remained very slow with spot prices for foreign in the region of 1s. per lb., less 5 per cent. for good quantities. Quiet markets are reported in all INDUSTRIAL CHEMICALS. The only change of importance is the pending break-up of the Acetone Convention at the end of the year, which will result in a considerable fall in values for the New Year. CLOVES.—Zanzibar are quiet and lower on the spot at 1s. 1½d. per lb., with sellers of January-March shipment quoting 11⅞d. per lb. c.i.f. Madagascar on the spot are 1s. 1½d. per lb., and January shipment is quoted at 9½d. per lb. c.i.f. The landings of Zanzibar for the week ended December 20 were 259 bales, and the deliveries *nil*, leaving a stock of 874, against 1,000 in 1929, and 2,561 bales in 1928. The landings of Zanzibar to date have been 7,244, against 8,718 in 1929, and the deliveries 6,367 against 10,095 in 1929. Landings of Madagascar for the week ended December 20 were *nil*, and the deliveries 29 bales, leaving a stock of 725, against 14 in 1929, and 2,747 in 1928. Landings to date have been 5,745, against 848 in 1929, and the deliveries 5,033, against 3,379 in 1929. PEPPER.—Lampong is firmer at 6¾d. per lb. spot. To arrive, sales include October-December at 5⅞d., and January-March 5⅞d. to 5⅝d. per lb. c.i.f. Tellicherry is 50s. c.i.f. for January-March shipment. Alleppy is 49s. c.i.f. for January-March shipment, with business done. White Muntok is 11d. per lb. spot. To arrive, sales comprise October-December at 9⅜d. to 9½d. to 9⅝d., and January-March at 9⅝d. to 9¼d. to 9⅝d. per lb. c.i.f. The AROMATIC SEED market remains quiet, with very little business passing. ANISE.—Spanish is 50s., Bulgarian 31s., and Russian 32s. 6d. per cwt., on the spot. CANARY.—Mazagan is still quoted at 24s. 6d. per cwt. for spot lots. Tangier remains unchanged at 23s. per cwt. spot. Morocco is quiet at 23s. 6d. per cwt. spot. Turkish (2 per cent.) is unchanged at 20s. spot. MILLET.—Morocco yellow on spot is 8s.; for shipment 7s. 6d. c.i.f. is quoted for prompt shipment. CUMIN.—Malta is 57s. 6d. on the spot for fair average quality. Morocco is 52s. 6d. spot; no business passing. For shipment the price is still quoted at 50s. c.i.f. FENUGREEK.—Old crop on spot is 17s.; new crop remains at 16s. 6d. Tunisian is quoted at 17s. 6d. spot. CORIANDER.—Old crop is 9s. 6d. spot and new crop 9s. 3d. For shipment the price now quoted is 9s. c.i.f., with no firm offers. CARAWAY.—Dutch on spot is unchanged at 31s. per cwt. for new crop. MUSTARD.—English is 25s. to 32s. 6d. per cwt. according to quality. COCONUT (DESICCATED).—Market on spot is unchanged at 24s. 3d. for fine, medium and coarse. For shipment the price now quoted is a little cheaper, sellers quoting 22s. 6d. c.i.f. for February-March shipment. RUBBER is again easier and the market is generally on the dull side. Whilst a certain amount of spot business has been passing there has been very little activity in the forward positions. Arrivals last week totalled 1,332 tons, whilst deliveries were 1,365 tons, showing a slight decrease of 33 tons in the stocks. The London stock now stands at 77,460 tons, against 53,894 tons at the corresponding period last year. The Liverpool stock now stands at 40,300 tons. Quotations (Monday, 5 p.m.): No. 1 standard ribbed smoked sheet, spot and January, 4¼d.; January-March, 4⅜d.; April-June, 4⅝d.; July-September, 4⅞d. per lb. PIMENTO is dull and unchanged on the spot at 6d. per lb. and is lower for shipment, with sales at 47s. per cwt. c.i.f. for December-January. SHELLAC is dull at 77s. 6d. per cwt. for usual standard TN orange on the spot; fine orange is 100s. to 200s., pure button 110s., and AC cakey 90s. To arrive, sellers of January-February and/or February-March quote 68s. per cwt. c.i.f. Sales for delivery include March at 70s. and May at 71s. per cwt. c.i.f. While first-hand prices for MENTHOL come dearer from Japan, there is little or no alteration in prices quoted by second-hand sellers. K/S is quoted at 11s. 3d. to 11s. 6d. c.i.f., and spot K/S at from 12s. 9d. to 13s. per lb.

Essential Oils

ANISE (STAR).—"Red Ship" is distinctly firmer, and forward offers for January-February shipment are now: leads 2s. to 2s. 1d., tins 1s. 11d. to 2s., and drums 1s. 10d. to 1s. 11d. per lb. c.i.f. On the spot, leads are 2s. 10½d. to 3s., tins 2s. 9d. to 2s. 10½d. BERGAMOT on the spot for 35 to 36 per cent. is quoted at 9s. 3d., 38 to 40 per cent. at 10s. per lb. To arrive, c.i.f. the prices are 8s. 9d. and 9s. 6d. per lb. respectively. CASSIA, 80 to 85 per cent. is unchanged on spot at 3s. 3d. per lb., but is firmer forward at 2s. 10½d. c.i.f. CITRONELLA.—Ceylon on the spot is 2s. per lb., and to arrive 1s. 10½d. Java on the spot is 2s. 2½d., and forward 2s. 1½d. per lb. c.i.f. LEMON.—The present position seems rather perplexing, offers being made of so many different qualities that prices seem more than ever little or no indicaton of quality. Some houses adhere to the old way of offering, such as "sponge-pressed" and "machine-made"; others offer, for instance, various qualities of sponge-pressed, etc. Prices quoted are of a very wide range. Old crop, sponge-pressed, on the spot is 3s. 7½d. to 4s., and machine-made 3s. 1½d. to 3s. 6d. per lb. Old crop to come forward: sponge-pressed is 3s. 3d. to 3s. 4½d., and machine-made 2s. 9d. to 2s. 10½d. New crop to come forward: sponge-pressed, 3s. 6d. to 4s.; machine-made, 3s. to 3s. 3d. per lb. ORANGE.—Italian sweet orange on the spot is 8s. 10½d. per lb. and 8s. 6d. c.i.f. Bitter is 8s. 4½d. per lb. spot, and to come forward 8s. per lb. c.i.f. PEPPERMINT.—A number of orders for forward shipment of Japanese dementholised are on the market at prices which cannot be entertained; values are about steady. On the spot, K/S is 3s. 10½d. to 4s. and other brands at from 3s. 9d. to 3s. 10½d. K/S is 3s. 4½d. to 3s. 6d. per lb. c.i.f., and other brands are quoted at from 3s. 3½d. to 3s. 5d. American on the spot is at from 8s. 9d. to 9s., and to arrive c.i.f. at from 8s. 3d. per lb. and upwards as to brand.

Fixed Oils, etc.

REDUCTIONS in values for a number of the vegetable oils are recorded. Acid oils, castor, coconut, cotton, palm kernel and palm oils are all easier. Linseed oil is slow and at very low rates. American turpentine is unchanged on a nominal market. ACID OILS.—Market is slow and quoted prices are slightly easier: coconut and/or palm kernel, 21s.; groundnut, 19s.; soya, 18s. spot. CASTOR is quiet and slightly easier: pharmaceutical, 40s. 6d.; first pressings, 36s. 6d.; second pressings, 33s. 6d. spot, in barrels, in not less than one-ton lots. COCONUT.—Deodorised in barrels on spot is slightly cheaper at 38s.; Ceylon, 25s. 3d. c.i.f. COTTON is dull and easier: deodorised, 31s.; common edible, 30s.; soapmaking, 27s.; crude, 25s. 6d. spot. GROUNDNUT is slightly easier and still flat: deodorised, spot, 36s.; crude Oriental, 25s. 3d. c.i.f. PALM KERNEL is slow and easier: deodorised, 36s. 3d.; crude, 27s. 6d. spot. PALM.—A further reduction in prices for all grades is recorded and the market closes dull and unsteady: Lagos, 21s.; softs, 20s.; mediums, 20s.; hards, 21s.; bleached, 23s. spot. RAPE is easier and still very quiet: refined, 33s. 6d.; crude, 32s. spot. SOYA is dull and rather unsteady: deodorised, 35s.; crude, 22s. 6d. spot. LINSEED (raw, naked).—The market has been slow throughout and values for all positions are easier: on spot, 25s. 9d.; December, 21s.; January-April, 19s.; May-August, 18s. 9d.; September-December, 19s. 10½d. Boiled oil on spot, 29s. 3d. TURPENTINE.—Although American cable advices were a shade steadier, with the Savannah quotation at about 36 cents, the tone on this side has remained very dull, with practically no alteration in values. Spot was 34s. and January-April 34s. 9d.; these figures are rather nominal. RESIN has been irregular, with an indifferent demand, and c.i.f. quotations are in buyers' favour, due to the considerably heavier stocks reported lately. W/G stands at about 16s. 3d. and W/W 17s. 7½d., but business is possible even at less for the latter. There is very little interest shown for French resin with the c.i.f. quotation at about 12s. 9d. for W/W, but a considerable premium is wanted on the spot up to about 14s. 6d. per cwt.

Chemical Markets During 1930

As the post-war years come and go the number of violent and unanticipated fluctuations in the chemical markets continue to decrease. A few years ago constantly moving values in international rates of exchange, the release on the world's markets of huge quantities of reparation materials and spasmodic bursts of business, all tended to bring about jumpy markets and irregular values. With these unsatisfactory features no longer active, business has largely fallen back into its pre-war groove and is being transacted by those firms whose foundations are of long standing, built up on the commercial ideal of service, rather than speculation. During the past year, with the exception of a few seasonal products, such as citric and tartaric acids, there have been very few irregular and violent movements in values. Conventions continue a prominent feature in the pharmaceutical chemicals section, and this new phase has spread to industrial chemicals and to one or two coal-tar products. The stabilising of values of a product by way of agreement as to sales prices between home and Continental producers is largely a post-war introduction, and, under the difficult times experienced, it has proved on the whole fairly satisfactory. There have, of course, been breakdowns, and in many instances secondhand suppliers have undercut the standard values, or a source outside the Convention group has caused trouble, the latter necessitating an adjustment of the agreed prices. Nevertheless, it can be accepted as a fact that, but for the control of markets in this way, values would have undergone much wider fluctuations, and not a few of them would have been on a lower level than they are to-day.

Co-operation a Success

During a prolonged period of below average sales at a time when potential, if not actual, production was in most products considerably greater than consumption, the position would have no doubt become quite hopeless for manufacturers. Only by co-operation have the producers been able to hold values at a level that is fairly economic. Unrestricted competition might at times have brought with it cheaper prices to the consumers, but a steady market with reliable sources for regular supplies has no doubt more than compensated the consuming industries for the mere possibility of an occasional cheap buy. The state of the markets has prohibited the Conventions from making any attempt to exploit consumers, even had they desired to do so. Exorbitant profits are undesirable, and are, in the long run, bad business, but both manufacturers and the distributing merchants are entitled to look for a fair return for their services and that, briefly, is the object underlying the general adoption of business controlled by Convention. The Combines, as distinct from Conventions, continue to hold a predominating position in the markets of many products, but in some few instances their monopoly has been purely nominal. In many quarters there are those who are of the opinion that the chemical trade as a whole, with its thousand-and-one sides and branches, is quite unsuitable for wholesale rationalisation, and that the movement as it stands to-day is about the limit of its expansion. The two great home and Continental Combines appear to have made solid their place in the industry, and one cannot conceive anything in the nature of a breakdown in either quarter. While there does not appear to be any material evidence of close co-operation between the two camps, there is, as time goes on, undoubtedly a better understanding on each side of the other's desires. In some important products agreement as to competition and markets appears to have been arranged, probably by way of a "gentleman's agreement." There is, however, no sign of anything approaching a fusion of the two concerns, and it is considered rather improbable that such a development will take place.

A Harassing Year

As a whole, the British chemical manufacturers, large and small, have probably had a worrying and harassing year. Their graphs of sales are likely to show but very little tendency to increase, and most producers have had no easy task to maintain their totals of recent years. Nevertheless, when compared with many of the other leading industries of the country it is almost certain that manufacturers have done rather better than the average. While the demand for both heavy and fine chemicals has at no time of the year been really brisk there have been no periods of absolute stagnation. Business has always been moving, unsatisfactory in volume, perhaps, and rather cut as to price, but what else could be expected with such a prolonged period of national, international and world slackness in commerce. The slump in values of basic materials, such as metals and natural products, seems to have had but small effect on prices in the chemical industry. Red and white lead products and similar chemicals have, of course, fluctuated with metal values, but otherwise the world slump has had practically no impression.

K.I.D. Imports Increase

The key industry duties continue to operate, and the protected makers are in this way assisted in holding the home market or using the duty as a factor in bargaining when negotiating for agreement with their foreign rivals to form a Convention. Although values have fallen almost without ceasing since the duties first came into operation in 1921, the value of imported chemicals liable to the duty is greater to-day than in the early years. The volume, therefore, of such imports must have increased very considerably. This is somewhat astonishing, and might well suggest that the duties are not having the desired effect, but such is not the case. Undoubtedly the duties have given the home makers a strong weapon which they are using wisely. Duties of even greater magnitude than this one of thirty-three and a third per cent. *ad valorem* will not stop imports if the foreign producers desire to "dump" or to fight the home maker, or both, and such competition must mean false and uneconomical sales prices. It is far better for the home makers to have come to terms with their foreign rivals, using the import duty as a means to eliminate a price fight and obtain economic agreed sales prices. As the years progress the assistance rendered home makers by the duties

is helping them to consolidate their position in so far as the products they produce are concerned. The range is by no means comprehensive, but it is far greater than ever before in the history of the industry in this country, and it is well established and not likely to deteriorate when the duties lapse in 1936.

Merchandising Maintained

Despite the handicaps of poor trade, combines who refuse to do business with them, and the large number of markets that are now cut-and-dried under conventions, the genuine merchant distributor of chemicals continues to maintain his position in the trade, and is not likely to be removed. Many merchants are, of course, directly concerned in the operation of conventions, but their activities are spread in numerous other directions. Even the combines are nibbling at business offered them by the merchant, and in the case of the smaller producers they are quite happy to acknowledge their existence and the useful link they provide with consumers. A few years ago it was generally thought that at no distant date the merchants, as such, would cease to exist. The position to-day shows a decided tendency on the part of the majority of makers to be satisfied with a steady output passing in bulk quantities through merchanting channels, for which they receive practically cash terms instead of extended credit when selling in small lots direct to consumers. It is all to the good that producers and distributors are working together for their mutual benefit.

Average Prices Decline

As to the trade of the year, while no great increase in sales was anticipated, the prolonged periods of slow markets were disappointing. January and February were fairly good months and promised well for the year, but the demand in the spring was much quieter. As the summer extended so business fell away, and in August and early September the worst period of slackness in demand for the year was experienced. In the later months there was a fair and general improvement, which was maintained to the end of the year. Prices show a further slight decline on average, these movements being due in many instances to the forced liquidation of stocks in the hands of nervous holders. The general tone throughout has been steady, always allowing for the fact that most convention prices could be slightly discounted. Briefly, the year may be described as by no means an easy period of progressive business, yet the chemical trade has not suffered to the extent of many others, either as regards the fall in values or quantities of materials disposed of. As to the outlook for the coming year, if it is admitted that conditions, so far as the world of chemicals is concerned, are now more or less normal and there are many arguments in support of that assumption, then the markets for the coming twelve months are not likely to undergo any extensive alteration in values, and the total sales will, of course, largely depend upon the state of world trade generally. While we hesitate to make any definite forecast we look for a gradual and continual improvement in business commencing in about March/April of the coming year and for the chemical trade to show considerable improvement at the end of the coming year as a result. The prolongation of the operation of the Dyestuffs (Import Regulation) Act for another twelve months will not affect the position of those chemicals, imports of which have for ten years been prohibited except under licence. Salicylic acid, benzoic and pyrogallic acids are instances.

Pharmaceutical Chemicals

The volume of business transacted in this market during the year, although probably showing no increase on immediately preceding years, has, considering all the circumstances, been moderately satisfactory. The margin of profit, however, has usually been very limited, reflecting the keen competition for business in the majority of products. Fluctuations in values have been comparatively small and confined to a limited range of chemicals. Convention prices, while holding on quotation, have in many instances been discounted almost generally in actual sales. Merchants (if imports are a fair guide) seems to have well maintained their position, and it is pleasing to note that the friendly agreements between them and the home markets function with but little disturbance and breakdown. Home makers have held a strong position in some of the leading lines, such as aspirin, salicylates and, latterly, the bromide salts. The unusual and disappointing trend of the markets in citric and tartaric acids is referred to in our comments on the markets for these products.

ACETANILIDE values have remained stationary since January 1928 at 1s. 4¾d. to 1s. 6d. for B.P. crystals and powder. The prolongation of prohibition of imports under the Dyestuffs Act for another year is not likely to affect the position. AMIDOPYRIN has been unchanged for the year, but the controlled values have been discounted to no little extent throughout; crystals from 12s. 6½d. for ton lots, up to 13s. 3½d. for less than two cwts., with powder 1½d. per lb. more. Business has been very moderate. ASPIRIN.—Under the control which has functioned fairly well except for periods of cheap offers, has been steady throughout the year. During the latter months the home trade prices of 2s. 9d. to 2s. 11d. were generally obtained, and from the beginning of December, prices for small quantities were advanced to 3s. for 14 lb., 3s. 2d. for 7 lb., and 3s. 6d. for 1 lb., but this advance could not be sustained, and on December 19 they were reduced by 2d. per lb. The summer months were rather quiet, and there were appreciable quantities of cheap material available. From September onwards conditions improved with more business and a stronger market. Home makers have held a leading position in this market. BARBITONE opened easy at 7s. 3d. to 7s. 6d., and later moved to 7s. to 7s. 3d., and at these rates the market has usually been discounted during the last eight months of the year. BENZOIC ACID.—B.P. shows a slight reduction on the year, opening at 2s. and upwards for good-sized quantities. At the half-year values moved to 1s. 11d., and somewhat lower prices ruled during the closing months. Home makers have done all the business with imports prohibited under the Dyestuffs Act.

Cheaper Bromide Salts

Keen competition has been the feature of this important market. In the early months of the year dealers were well to the fore, but latterly the home makers appear to have forced the pace in price cutting. The quantities imported appear to have been considerable in the first half of the year. On the year, prices show a considerable decline, and this is due to the fierce rivalry already mentioned. Ammonium opened at about 1s. 10d. and was weak, moving down to 1s. 9½d. in February, 1s. 9¼d. in April, 1s. 9d. in May, 1s. 8½d. in September, and to the closing figure of about 1s. 8¼d. to 1s. 8½d. in November. Potassium in January was easy at 1s. 5¾d. for crystals and 1s. 5½d. for granular, and in February 1s. 5¼d. and 1s. 5d. respectively. In the middle months of the year the market was unsteady, and weakened in September to 1s. 4½d. for crystals and about 1s. 4¾d. for granular, in good-sized quantities. Sodium, in sympathy with the other salts, opening at 1s 9d , moved down to 1s. 8½d. in February, 1s. 8d. in May, 1s. 7½d. in August-September, and finally closing the year at about 1s. 7d. Efforts to introduce a control in this market have not met with success. There is little doubt that for important business the quoted values have occasionally been discounted. At present prices there would appear to be little or no profit, either for makers or dealers. CALCIUM LACTATE was offering at about 1s. 2d. to 1s. 3½d. as to quantity, in January, with a slight weakness in February and a good recovery in March when the market was healthy at 1s. 2d. to 1s. 4d. At the end of April prices declined to 1s. 1½d. to 1s. 3d., and from then on to the end of the year the market was fairly steady at about these rates. CHLORAL HYDRATE.—Home makers have done well, foreign make being mostly non-competitive. Makers' prices ruled steady for the first seven months at 3s. 1d. to 3s. 3d.

as to quantity for duty-paid crystals, with foreign on spot at about 3s. 6d. In August the former source reduced their rates to 2s. 11½d. to 3s. 1½d. as to quantity and packing, with foreign quoted at 3s. 3d. CITRIC ACID has been one of the most disappointing items, the movement in values proving the exception to the general rule. Contributory causes appear to have been the cheapening of raw material, abundance of supplies, a good deal from America and home sources, and no particularly great demand. Throughout the year the tone has been in buyers' favour, with an almost unlimited supply of cheap spot stuff available. For about a fortnight in August there was a temporary check in the downward movement of the market, but this better tone was not sustained. Home producers have had to contend with competition which was keen and persistent throughout. In January, the spot value of B.P. crystals was about 1s. 11d. less 5 per cent. for quantities, with a gradual fall during February-April to 1s. 8d. Business during this period was poor as compared with former years. At the end of May the market was cut to 1s. 6½d. and in June to 1s. 6d. In July-August there was a slightly better feeling, and values were steady at about 1s. 6d. to 1s. 6½d., less 5 per cent. In September, the tone was slightly easier with cheap sellers to clear. In October, 1s. 5½d. to 1s. 5¾d. ruled and 1s. 5d. in early November, and later in the same months the market fell right away to 1s. 2d., less 5 per cent. At the moment spot values for large quantities are about 1s. 1d. to 1s. 1¼d. with little interest taken. B.P. CREOSOTE has been quoted throughout the year in the region of 1s. 8d., the market being quite uneventful. CREOSOTE CARBONATE has also been steady at from 5s. 8d. to 6s. for the twelve months. GUAIACOL CARBONATE shows a slight depreciation, opening at about 4s. 6d. to 4s. 10d., and moving to the closing rates of 4s. 4d. to 4s. 8d., as to quantity, in June. Business has been poor and the market easy.

HEXAMINE FREELY CUT

Competition in HEXAMINE, both second-hand and from sources outside the Convention, made itself felt. In the early months of the year the Convention prices, which came into operation the previous August, were unchanged at 2s. 2¾d. to 2s. 4d., as to quantity, but it was not easy to secure business at these rates. Considerable quantities were then brought on the market and offered down to 1s. 11d. to 2s., and later at 1s. 10½d. to 1s. 11½d. By this time the higher Convention rates had become nominal. Later in the year a further slight reduction to 1s. 10¼d., for quantities, was recorded, and in October the figures were down to 1s. 10d. to 1s. 11d., as to quantity, and even these rates are said to have been shaded for important business. The very large bulk of the business has been in imported make. While business, so far as the quantity sold is concerned, seems to have been up to average, the margin of profit has probably been small in comparison with the turnover. HYDROQUINONE.—The control of this market seems to have operated very satisfactorily, and only at infrequent intervals have odd parcels been available at less than the Convention prices, which have remained unchanged at 3s. 7¼d. to 4s. 5d. per lb., as to quantity, throughout the year. Business has been satisfactory. METHYL SALICYLATE B.P. opened with the agreed price at 1s. 6d. to 1s. 8d., and was reduced to 1s. 3d. to 1s. 5d. in February. At these figures, which applied to home makers and importers, the market has been steady throughout, and business has been satisfactory, with the home makers doing a very fair share of the business. METHYL SULPHONAL has been quoted at the fixed prices of 12s. 7d. to 13s. 10d. during the whole twelve months, but most of the business has no doubt been based on cheaper prices. Material was usually available at well under these figures, and the demand has been limited. PARAFORMALDEHYDE (100 PER CENT. POWDER) has met with some good business, although competition for large-sized contracts has been keen. Opening at 1s. 7d. and upwards, in May a farthing less was quoted, and in the autumn the spot figure was 1s. 6½d., and in November 1s. 6¼d. to 1s. 6¾d. was quoted. In the last month of the year as low as 1s. 5¼d. was mentioned for big business. PARALDEHYDE has experienced a further year with prices unchanged at 1s. 1d. to 1s. 3d., as to quantity and packing. PHENACETIN shows a slight fall in value on the year, this movement being principally due to keen competition. In January, prices on spot were 3s. 10d. to 3s. 11d., and in February the lowest price was 3s. 9½d. By March, values had been adjusted down to 3s. 8d. to 3s. 11d., with powder 1½d. more. These prices held for the remainder of the year so far as controlled quotations were concerned. Business, however, was generally done at lower rates during the latter part of the year. While the volume of sales has been good profits have of necessity been rather fine. PHENAZONE.—Values are cheaper on the year, with the market almost continually troubled with price-cutting. In January, 7s. 2d. to 7s. 3½d. were the spot figures, and a reduction to 6s. 11d. to 7s. 3½d., as to quantity, with powder 1½d. more, was registered in March. The majority of business of any size since then has been transacted at lower rates on a very keen market. PHENOLPHTHALEIN has been one of the steadiest markets throughout the year, with values on spot at 5s. 11d. to 6s. 1½d., as to quantity. At short intervals these prices were discounted by occasional cheap lots, and this is apparent at the close of the year. POTASSIUM PERMANGANATE (B.P.) has met with the usual volume of business, which, except for a limited number of large quantities, has been confined to the small requirements of druggists; quoted at about 5¼d. to 6d., as to quantity, throughout. RESORCIN.—The advances in values that took place in 1929 were generally maintained this year, spot values seldom moving below 2s. 11d. to 3s. 2d., as to quantity, and during the latter months of the year these figures have been fully maintained.

A GOOD YEAR FOR SALICYLATES

SALICYLIC ACID (B.P.) has again had a good year, and makers' prices have throughout been steady and show some advance. In January, the market was 1s. 5d. to 1s. 7d., and in April small parcels were advanced to 1s. 8d., quantities remaining unchanged from 1s. 5d. On December 1 the makers' scale was adjusted to 1s. 5d. to 2s., as to quantity. On current quotations this market is not likely to be of interest to importers of Continental, and no serious change in values is anticipated, especially as the Dyestuffs Act has been prolonged for another year. SODIUM SALICYLATE (B.P.) during the first two months of the year was quoted at about 2s. 3d. to 2s. 5d. for powder and crystals, as to quantity, and home makers appeared to be holding the market. In March, under an arrangement between home and Continental makers, prices were fixed for the home trade at 1s. 10d. to 2s. 1d., as to quantity, for powder, with crystals 1d. more. Export prices to the Empire were agreed upon at the same time at 1s. 10¾d. to 2s. 0¼d., as to quantity. These prices were unchanged up to December 1, when small quantities were advanced up to 2s. 5d. for single lb. of powder and crystals 2s. 6d. for the home market. Business has been fairly satisfactory, and home makers have probably done the bulk of the home trade business. Some imports from Canada were reported. SULPHONAL.—Prices on quotation on spot have been unchanged throughout at 10s. 1d. to 11s. 2d., as to quantity, but, with the market at no time active, nearly all business has been done at lower rates than those mentioned. TANNIC ACID (B.P.) LEVISS opened the year at 2s. 9d. to 3s., and was somewhat easier in February. In May-June, spot was down to 2s. 8d. to 2s. 11d., and for a time the market was easy. In October, there was a stronger feeling and values were fully 2s. 8d. and upwards. The better tone continued up to the end of the year. TARTARIC ACID (B.P. CRYSTALS) has experienced about the worst post-war year so far as values are concerned, and sales have probably been below average. The chief cause of the unusual trend of the market during the season was the introduction at the beginning of the year of keen competition from Spain.

(To be concluded.)

Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1930, p. 341.

(From "The Trade Marks Journal," November 26, 1930.)

"JOHNSOL"; for disinfectants (2). By Johnson & Sons, Manufacturing Chemists, Ltd., 233 Hendon Way, London, N.W.4. 517,134.

CALMAG"; for medicinal chemicals (3). By J. Phillips, 146 Great Portland Street, London, W.1. 511,182.

"VENMORATE"; for medicinal chemicals (3). By W. Mallard & Co., Ltd., 45 Mallard Street, Hackney Wick, London, E.9. 516,506.

"BYLAMIN"; for hexamine and chloric acid tablets (3). By May & Baker, Ltd., Church Road, Battersea, London, S.W.11. 517,021.

RELAXO" with monogram "M.B." ("Relaxo" disclaimed); for medicines (3). By M. Blumenthal, 164 Lightbowne Road, Moston, Manchester. 517,014.

"PYNETA"; for medicated toilet paper (3). By Taylors Drug Co., Ltd., 347-359 Burley Hill, Leeds. 517,132.

"PHORA"; for medicinal chemicals (3). By P. Woog, 5 rue Peguy, Paris. 517,224.

"COCKTAIL"; for perfumery, etc. (48). By Société Anonyme Jean Patou, 7 Rue Saint Florentin, Paris. 517,182.

According to "The Trade Marks Journal" of November 26, 1930, leave has been given to Phosferine (Ashton & Parsons), Ltd., to alter the mark 498,291 (3) for "PHOSFERINE HEALTH SALT."

(From "The Trade Marks Journal," December 3, 1930.)

"DOGGO" with picture of dog running; for chemicals for repelling dogs (2). By J. A. Rennie, 118 to 120 Fleet Street, London, E.C.4. 515,786.

"DEODIS"; for all goods (2), and for metal sprayers (13). By R. Davies, 22 Northumberland Avenue, London, W.C.2. 516,828/829. (Associated.)

"DAGGETT and RAMSDELL'S"; for cold cream (3). By Daggett and Ramsdell, 2 Park Avenue, New York, U.S.A. 507,711. (Associated.)

"MARINELLO" with outline drawing of woman's head; for medicinal chemicals (3), and perfumery, etc. (48). By Marinello Co., 72 Fifth Avenue, New York, U.S.A. 514,008/009. (Associated.)

"GLYCO-IZAL"; for medicinal chemicals (3). By Newton, Chambers & Co., Ltd., Thorncliffe Ironworks and Collieries, Nr. Sheffield. 516,485. (Associated.)

"STEPPIT"; for foot ointment (3). By E. E. Brooks, 19 Pilkington Street, Bulwell, Nottingham. 516,897.

"CRAGMOOR"; for medicinal chemicals (3). By S. F. Brockingten, The Pharmacy, Church Street, South Brent, Devon. 517,079.

"LA VILLE"; for perfumery, etc. (48). By Taylor & Nathanson, 283 Manningham Lane, Bradford, Yorkshire. 511,933.

"BUTYVITE"; for skin emollients (48). By T. Heaton, 23 Kirkway, Wallasey, Cheshire. 515,984.

"VELMAG"; for all goods (48). By G. Boehm, 38 Moreland Sreet, Goswell Road, London, E.C.1. 516,148.

"SPRING MORN"; for perfumery, etc. (48). By Cussons, Sons & Co., Ltd., Moor Lane, Kersal, Manchester. 516,815.

(From "The Trade Marks Journal," December 10, 1930.)

"SOLUTION D" with the letter "D" encircled by a chain; for insecticides (2). By R. Sumner & Co., Ltd., 40 Hanover Street, Liverpool. B512,750.

"NO CURE NO PAY" and "G. F. DAWES" intersected; for cattle medicines (2). By Smith & Sons, 44 Magdalen Street, Norwich. 513,999.

"ARSENICOLA"; for an arsenical preparation for ticks, etc. (2). By The Standardised Disinfectants Co., Ltd., 43 Gower Street, London, W.C.1. 517,794.

"ROTOLIN"; for medicinal chemicals (3). By M. Wegner, 3 Courbière Strasse, Berlin, W.62. 514,545.

"RULIM"; for an ointment (3). By C. E. M. Chambre, 2 Northland Row, Dungannon, Co. Tyrone. 516,983.

Correspondence

Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

Western Australian Sandalwood Oil

SIR,—I read with interest the comments by Mr. A. R. Penfold in your issue of September 13 relative to Western Australian sandalwood oil. I do not wish to labour this subject unduly by further conflicting the issue, but I feel I must reply to two important points dealt with. First, the question of identifiable santalol. The majority of the raw material used by us comprises stick wood, the remainder being roots and butts, and we have not found the composition of the oil vary to any appreciable extent, in either of these classes of wood, provided that the material is green when pulled. My object in replying to Mr. Parry's article was on account of the fact that Mr. Penfold had stated in his paper that he could find no santalol in oils of his own distillation. This statement was made use of by Mr. Parry, and had to be replied to. It is generally known that the oil produced by my company is a rectified oil; but no amount of rectification would produce an oil containing santalol if the original oil contained no santalol, and I am sure Mr. Penfold will agree in view of my statement above as to the material we actually use in our production that there is some mistake somewhere. The second point I wish to deal with is the question of the nomenclature of the species. Anyone reading the article of September 13 would on first perusal attribute to me the use of the name *Eucarya spicata*, in my letter of March 29 last; but I have on no occasion used this term when describing Australian sandalwood, and have always called it by what I consider the correct designation, namely, *Santalum spicatum*, A.D.C.; and to substantiate my attitude in this connection I am relying upon the excellent work of Dr. Emil Perrot, whose reputation is too well known throughout the world to be disputed. I am also relying on Western Australian botanists, who have the advantage of securing first-hand material, and in this connection it would be as well to quote an extract from a Bulletin by Mr. C. A. Gardner, published by the Western Australian Forestry Department, in which he to my mind quite satisfactorily disposes of Sprague and Summerhayes' contention that the correct designation is *Eucarya spicata*. The extract is as follows:—

"The Santalaceæ have not been the subject of a separate monograph. Until this is undertaken, the opinions which have been built up on incompleto observations are almost certain to continue, and give rise to still further misconstructions. An example of this is the work of Sprague and Summerhayes, quoted above. They have accepted as a fact, from Bentham, that his "Fusanus" has an inferior ovary, and have thus recognised a new genus in *Mida*, which can have no generic status. The writer, in addition, considers the system proposed by Bentham and Hooker to bo artificial. It is perhaps a convenient method of classification, to divide a section of the tribe Osyridea on account of the degree of disc division, but the character is obviously artificial when, in another section of the samo tribe, it is of no more than specific importance. Hence, in Australia, we had tho vexed Santalum-Fusanus question, just as there are differences of opinion regarding tho African Colpoon and Osyris, and it is only by a critical investigation of tho whole family made from good material that the true position of these genera can be established.

"In 1927 the writer, in a note submitted to the Royal Gardens, Kew, pointed out that the name Fusanus was invalid under the International Rules, and the subject was therefore taken up by Sprague and Summerhayes in the publication quoted above. Apart from supporting Bentham's decision, the authors of the paper agreed to give generic rank to two species, under tho name of *Mida*, and proposed *Eucarya* as a generic name in place of *Fusanus*. Tho Australian material examined must have been very poor, and this is borne out by the fact that they found it necessary to refer to a plate of Miss Flockton's to help out their

generic diagnosis of *Eucarya*, in Maiden's "Forest Flora of New South Wales." Following Bentham, they have assumed that an inferior ovary is a generic characteristic of their "Eucarya" (*Fusanus*), and they thus have no difficulty in separating *Mida* as a genus. When, however, it is considered that *Eucarya* has not an inferior ovary, at anthesis, it becomes quite impossible to accept the proposals of Sprague and Summerhayes."

Yours faithfully,
For and on behalf of Plaimar, Ltd.,
H. V. MARR, Managing Director.
Perth, Western Australia.

Welfare Centres' Trading

SIR,—Practically every chemist in retail business has come across customers, who can well afford to purchase their necessaries in the usual manner, taking advantage of the welfare centres to obtain foods and medicines at reduced prices. We now have a report (*C. & D.*, November 22, p. 636) that this question was definitely raised at a meeting of a local council, and the reply given was to the effect that the centre was prepared to supply irrespective of income if a doctor said the goods were necessary. So now we know exactly where we are; by this ruling anyone, no matter how well off, can take advantage of cheap nourishment and medicaments for their children, if they can get a doctor to say it is required. After such an admission as the one quoted, it is time that this trouble was considered seriously; there must be some representative body through which retailers could get their side of the question raised in the proper place.

Faithfully yours,
RETALIATE (1/12).

P.A.T.A. Council Election

SIR,—We desire to express our sincere thanks to the retail members of the P.A.T.A. for the vote of confidence given to us in the recent election. We return to the Council knowing that our work on that body is appreciated, and that our retail friends throughout the country trust us to do all in our power in the future, as we have done in the past, to further the price-maintenance work of the Association, which is so vital a factor in the well-being of pharmacy. It is no exaggeration to state that never has the P.A.T.A. system been of greater material benefit to retailers in pharmacy than during the past year or so of acute trade depression, and never, may we add, has the Association had to face so difficult and anxious a period. When times are bad the tendency to make the cutting of popular proprietaries a means of attracting other business is unusually pronounced, and, in recent months, this practice has been adopted in an increasing degree by traders outside pharmacy. The P.A.T.A. organisation has been engaged in an unremitting effort to counteract the cutters' activities, and only those who are familiar with the inside work of the Association, and who have to deal in Council with the difficulties of the position, can understand the magnitude of the task that has to be faced. To meet cutting by cutting, as has been suggested, would be, in our opinion, the most suicidal policy imaginable. It would result inevitably in the complete breakdown of the price-maintenance system. Alternatively, to remove from the P.A.T.A. list every article that is subjected to restricted or localised cutting would mean the penalising of, say, 98 per cent. of retail chemists for the benefit of the other fraction. We feel we may justly claim that, taking all the circumstances into consideration, the P.A.T.A. is functioning as efficiently as is humanly possible. We believe that our retail friends realise and appreciate this fact, and we thank them again for showing their appreciation by returning us to the Council.—Yours faithfully,

JOHN KEALL,
THOS. MARNS,
H. H. MARSHALL,
P. F. ROWSELL.

Legal Queries

H. E. H. (6/11).—Must an assistant, aged sixty-six, be insured under the National Health and Unemployment Insurance schemes? [By reason of his age, the man is outside the scheme; but his employer must pay his (the employer's) contributions in respect of the man under both schemes.]

P. D. (15/11).—Entire drugs are exempt from medicine-stamp duty, and may be sold unstamped by qualified persons or by any other person holding a patent medicine licence. They may bear ailment names, may be recommended for ailments, and proprietary rights may be claimed for them without incurring liability to medicine-stamp duty.

Juvex (8/10).—For the purpose of probate, a valuer was engaged to value certain property. The value he placed upon it was £3,000, and his fee was £10. Is that charge correct? [In our view the charge is a reasonable one. In London, a valuer charges about £1 1s. per £100 for valuing property; but, in the country, the fee is usually less.]

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for, and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

T. H. F. O. (27/8).—WATERPROOF CEMENT.—This is composed of casein with calcium carbonate and sodium carbonate; but probably the calcium has been introduced in the form of oxide or hydroxide. A feature of this preparation is the small proportion of inorganic matter; the ash amounts to 20 per cent., the lime and the soda being in roughly equal proportions.

M. H. S. (16/8).—POLISHING PREPARATION.—This is used for giving brass, copper and similar metal objects a silver coating, the preparation being dabbed on with cotton wool and the article then rubbed over with flannel. It is a colourless solution smelling strongly of ammonia, with a copious quantity of white powder in suspension. The latter is chalk. The solution contains a good proportion of silver, also cyanide.

Retrospect of Fifty Years Ago

Reprinted from
"The Chemist and Druggist," December 15, 1880

Medical Practitioners' Dispensing Scheme

"We have always held that medical men, especially those whose labours are confined to the poorer districts, throw away a certain profit they are quite entitled to when they cease to dispense their own medicines. We do not at all advocate the old plan of charging so much for medicine, and throwing in advice for nothing; but we hold that, in throwing away all control over careful dispensing and the purity of drugs, the medical practitioner is also throwing away a legitimate source of income, and, which is of greater importance, a guarantee for the character of the remedies he prescribes. . . . Certain medical practitioners have there [in Leicester] agreed to form a joint-stock company in order that they may provide common premises and a duly qualified dispenser to make up their prescriptions, and, if desired, the prescriptions of others. This is simply a new form of co-operation, and as such there can be no possible objection to it."—"Medical Times and Gazette."

Owing to pressure on space, this week's instalment of the C. & D. Commercial Compendium is held over.

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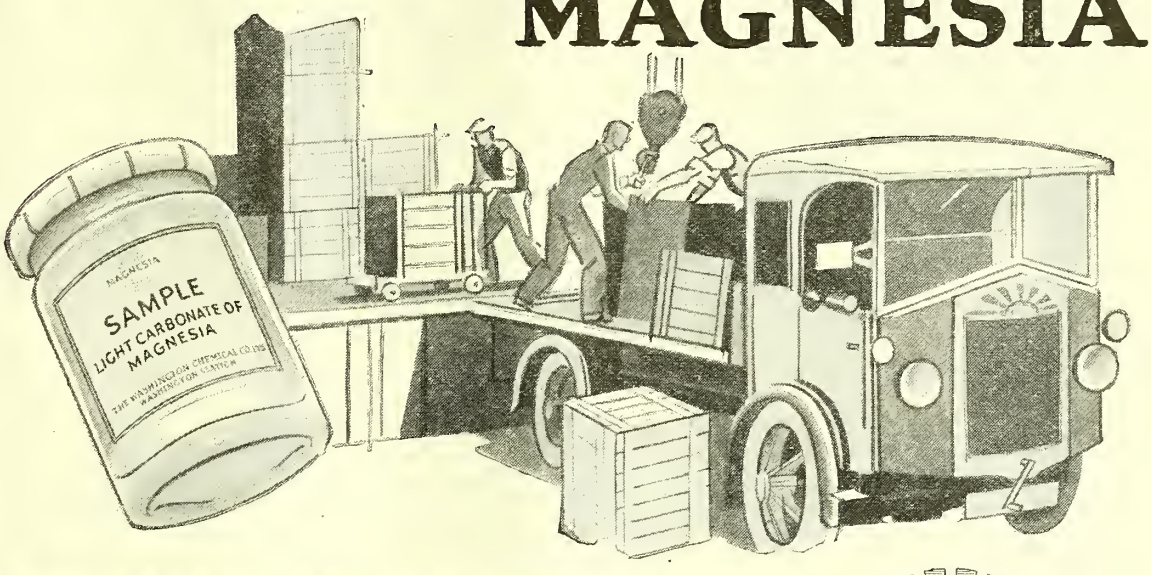
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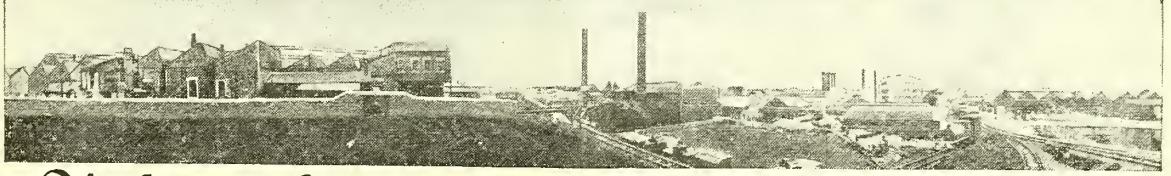
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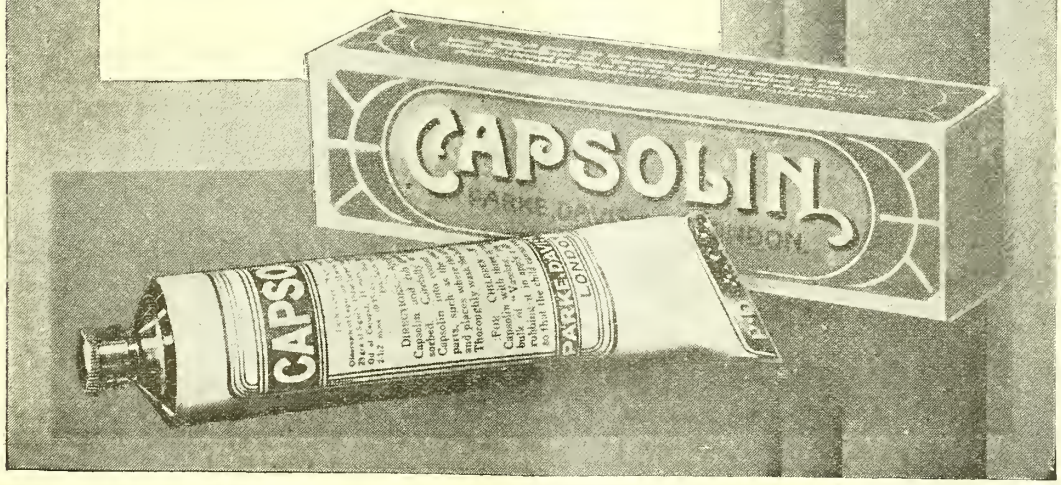
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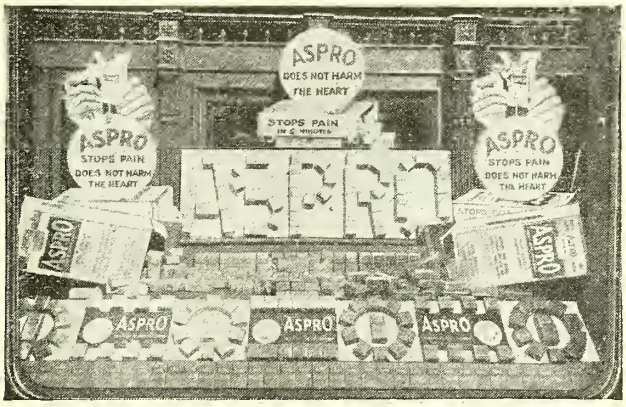
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FOR THROAT AND CHEST

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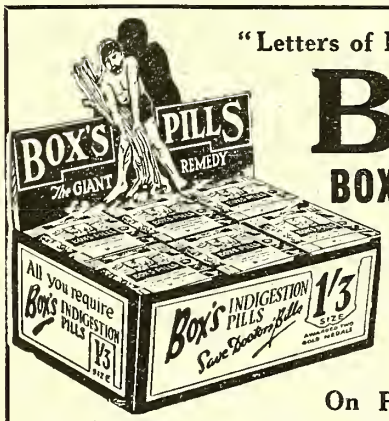
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5/- PER DOZ.
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10/- PER DOZ.
1/3 TINS



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On P.A.T.A. LIST
In 1/3, 3/-, 5/-, 12/- and 22/- boxes

Box's Pills have a special public of their own—many of whom have had to go considerable distances to obtain their favourite medicine, or to order from Plymouth, for lack of a local source of supply. Pharmacists are now co-operating in distribution of Box's Pills in increasing numbers, and healthy local demand is developing. Stock them and show them and you will sell them. Display outers and other attractive show material free on application.

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,, Special Aperient Pills ..	1/3, 3/- & 5/-	11/-, £1 : 7 : 0 & £2 : 4 : 6
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An attractive Showcard and Dummies supplied on application

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The great vaporised antiseptic, gives relief at once.

For nearly 50 years Vapo-Cresolene has been known and sold throughout the world as the reliable remedy for bronchial troubles such as

COUGHS, COLDS, INFLUENZA, BRONCHIAL ASTHMA, CROUP, BRONCHITIS, AND WHOOPING COUGH.

AN EXTENSIVE ADVERTISING CAMPAIGN is now running and will continue throughout the whole of the winter.

STOCK AND SELL VAPO-CRESOLENE.

QUICK SALES,
SUBSTANTIAL PROFITS,
SATISFIED CUSTOMERS.

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EVERY WINTER BRINGS AN INCREASE



in the demand for **Snowfire**

It's a case of one customer making many, where the Snowfire Tablet is concerned. This magic little tablet is a real friend to the skin in winter, soothing chapped hands, making work-roughened hands smooth and white again, softening dry, cracked lips. And the Snowfire Tablet is always so well advertised, too. Display it prominently this winter—brisk sales and good profits will result.

Snowfire
TABLET

Made by: F. W. HAMPSHIRE & CO. (1927) LTD.
Sunnydale Works, Derby.

AGENTS: India: Messrs. Siqueira & Son, 121 Fort St., Fort, Bombay.
Australia: Messrs. Salmon & Spraggon (Australia), Ltd. 218 Kent St., Sydney, N.S.W.
Canada: A. Whitchurch Little, 807 The Wilson Building, 60 Front St., West Toronto.
U.S.A.: F. W. Hampshire Corporation, 882 Harrison Avenue, Boston, Mass.

TWO LEADERS

— BEECHAM'S PILLS — DR. CASSELL'S TABLETS



Backed up by consistent and forceful advertising which has created an enormous buying force in the Drug Trade, BEECHAM'S PILLS and DR. CASSELL'S TABLETS are two leading lines the selling power of which has long been recognised. The chemist will do well always to have a good stock on hand. Both are quick sellers —both are easy to handle and both give fair profits.



Other Beecham-Veno lines also in great demand are GERMOLENE, The Aseptic Skin Dressing, GERMOLENE (Medicated) TOILET SOAP & BEECHAM'S POWDERS.

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THE
BEECHAM-VENO CENTRAL DISTRIBUTING DEPOT
Chester Road - MANCHESTER
Tel. No.: 1961 *Trafford Park.*

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A Polyvalent Natural Antibody.

EDWENIL

For Bacterial Invasions of an Endotoxic Nature.

in

INFLUENZA

Most cases will be aborted if treated early enough. 2 c.c. of Edwenil given at intervals of 12 hours, for two or three days, will suffice.
It will be very noticeable that post-influenzal debility is absent.

The rapidity with which a common cold yields to from one to three injections is the source of much comment. There is no local irritation following the injection, nor any untoward reaction later. Edwenil is non-toxic.

BE READY TO FILL PRESCRIPTIONS

EDWENIL is obtainable in 25 c.c. bottles, price 21/-

Made in the laboratory of

E. H. SPICER & CO. LTD., WATFORD, HERTS

KOMPO FOR COLDS

Wholesale Prices

1/3 Size
11/6 per dozen net
3/- Size
27/6 per dozen net

Carriage Paid Gross Quantities or equivalent.

Manufactured only by

J. F. WHITE & CO., Chemists
BENSON STREET, LEEDS.

DISTILLED WATER AT ⅓d. PER GALLON

By using Brown's Patent Automatic Water Stills pure distilled water may be obtained at the above cost, using steam at any pressure between 30 and 100 lbs. per square inch. The product is pure distilled water, *not* condensed water from steam service pipes

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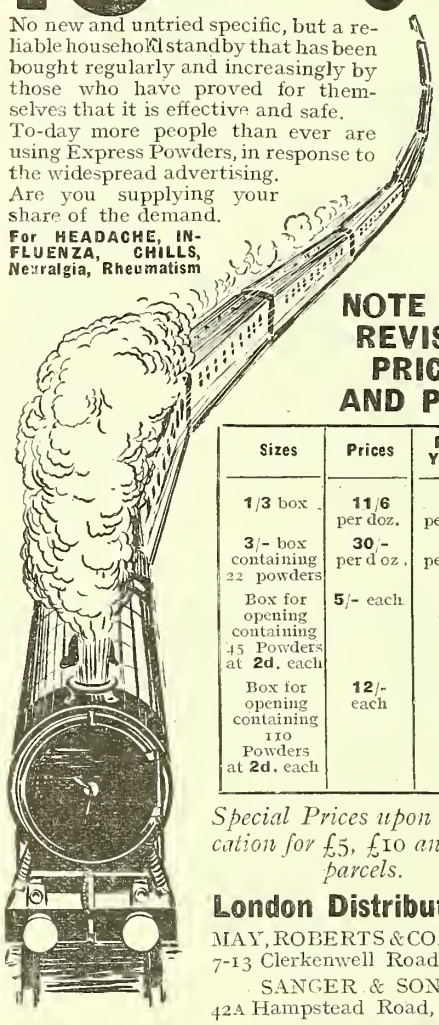
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For HEADACHE, INFLUENZA, CHILLS, Neuralgia, Rheumatism



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Elixir Strontii Bromid. et Valerian Deodorat.

AN EXTREMELY PALATABLE CALMATIVE & NERVE SEDATIVE

8 OZ. BOTTLES 3/6

Prepared and extensively advertised by

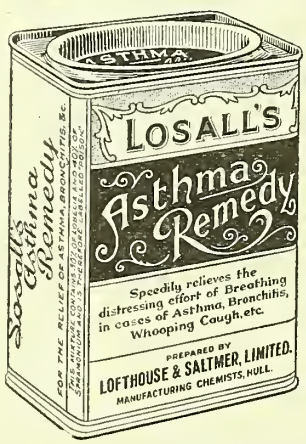
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30 years' test—

Has proved remarkably
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Show cards and samples for free distribution on application.

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We specialise in the following and offer the best of packs and the keenest prices—

Malt and Oil, Olive Oil,

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Also **National Mark Malt and Oil**

Cod Liver Oil,

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"Velva" Bottle Series:

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"NATIONAL MARK" MALT PRODUCTS.

Guaranteed made from English Barley Malt

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Malt Extract with Cod Liver Oil

Customer's own name and address printed on label.

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Yeast specially prepared for medicinal purposes.

GUARANTEED ABSOLUTELY PURE.

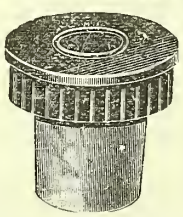
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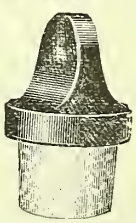
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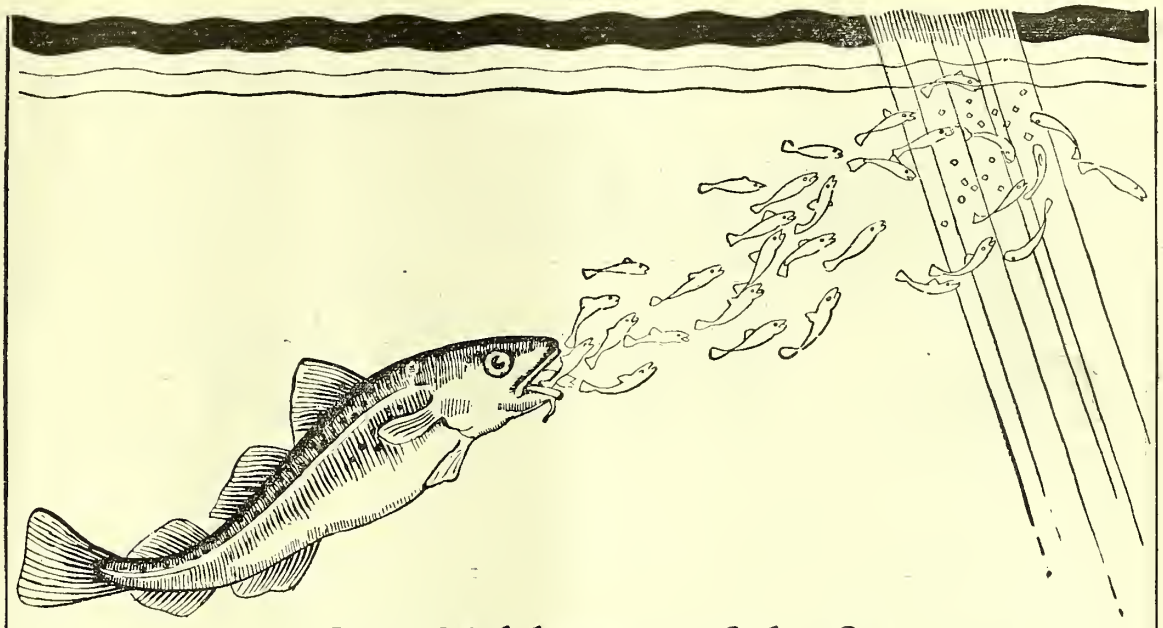
200 Varieties Any Colour.

A suitable Composition Stopper will enhance the selling value of your package. Let us fit your Bottles and quote you.



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One Tablespoonful of Norwegian Cod Liver Oil daily is sufficient to prevent Goitre.

The human body needs a certain minimum quantity of iodine every day. If this be lacking in one's normal diet, then goitre — that dread disease — may ensue.

But here, too, cod liver oil proves a sovereign remedy. Dr. Gulbrand Lunde of Stavanger, Norway, has proved that a shortage of iodine can be made good by a daily dose of cod liver oil. He says:

"Investigations have shown that Norwegian cod liver oil contains iodine in the proportion of about 15 milligrammes of iodine per kilogramme of cod liver oil. This iodine is present in organic combination. It has been shown that five hundredths of a milligramme of iodine per day is a sufficient quantity to cover the iodine requirements in even the worst goitre districts. This means that a daily dose of only 3½ grammes will be sufficient to abolish any deficiency in iodine, and thus prevent endemic goitre".

Norwegian cod liver oil is also one of the most useful allies against the infections of ordinary colds, bronchitis, tuberculosis etc.

Growth-promoting and anti-rachitic.

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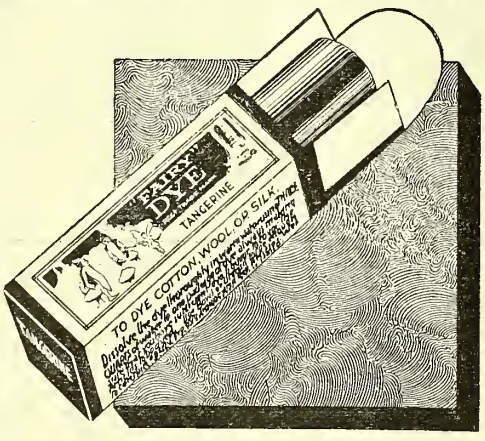
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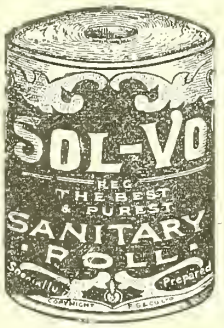
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The M. G. TOILET ROLL

SUPERIOR QUALITY.

Three dozen Rolls ...	per doz.	4/9 net.	One gross Rolls ...	per doz.	4/3 net.
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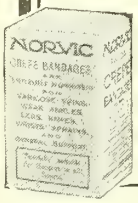
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They are of Highest Quality and Packed Hygienically.
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Also Forster's "Fenolin Fluid" For Whooping Cough.
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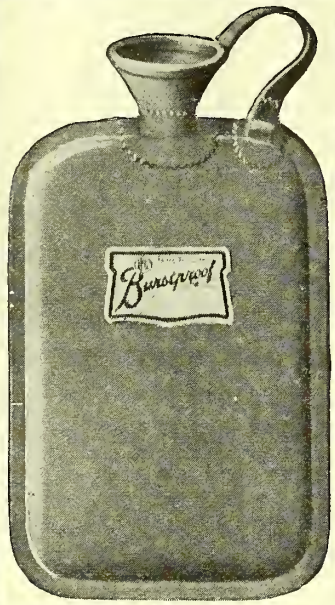
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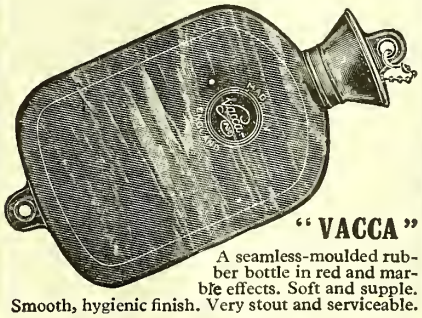
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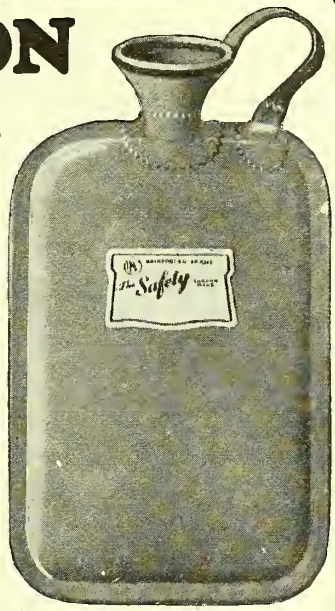


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A super hand-made bottle with patent reinforced seams. This bottle is absolutely proof against trouble of any kind. You cannot buy a better bottle.



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"Crêpsyl" (WOVEN CRÊPE)
Dainty and ideal for understocking wear.

BANDAGES—widths 2in. to 4in. 1/8 to 3/4 ea.
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Beware of imitations and copies.

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Ideal for Varicose Veins.
Bandages 2/- to 4/- ea.
Binders 4/- to 15/- ea.

ALL BINDERS REINFORCED TO PREVENT SAGGING. SAMPLE CUTTINGS FROM MAKERS.

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CLINICAL THERMOMETERS
because they are:-
GUARANTEED TO *STAY* ACCURATE
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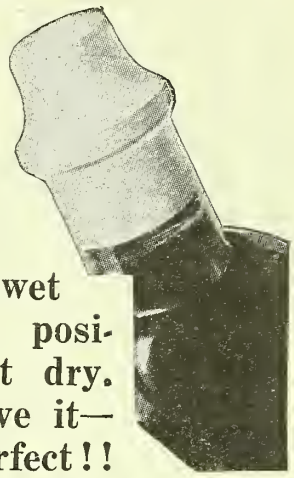


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This shows a net profit on the transaction to the Chemist of 35% besides attracting the passer-by to the window and considerably augmenting sales generally.

The above conditions apply only to the United Kingdom.

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3½ dozen 1/3 size at 12/- net	...	£2 2 0	£2 12 6
2 ,, 3/- ,, at 30/- ,,	...	3 0 0	3 12 0
		5 2 0	
Less 10/6 for Window Show	...	10 6	
		£4 11 6	£6 4 6

Showing a Net Profit of £1 13 0 on an outlay of £4 11 6.
Window Display Material Free and Carriage Paid.

WHOLESALE PRICES OF PHOSFERINE.

Carriage Paid.	*Monthly Account.*
1/3 size ...	12/- per doz. net.
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5/- ,, ...	48/- ,, ,,
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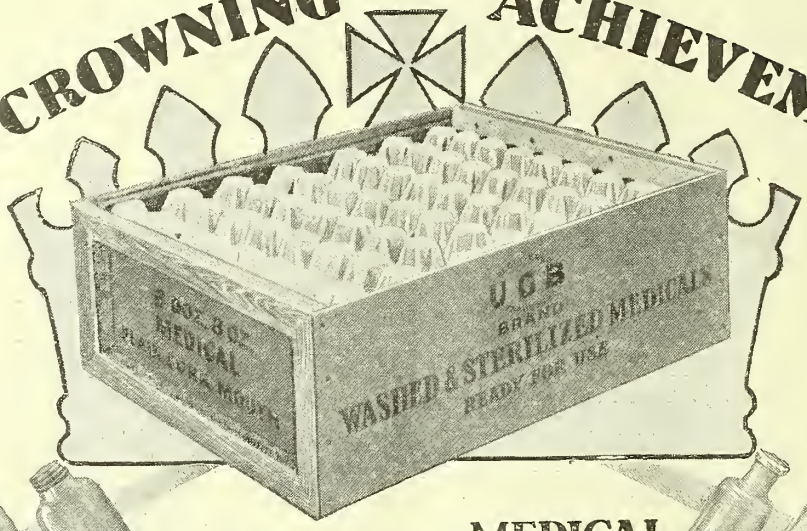
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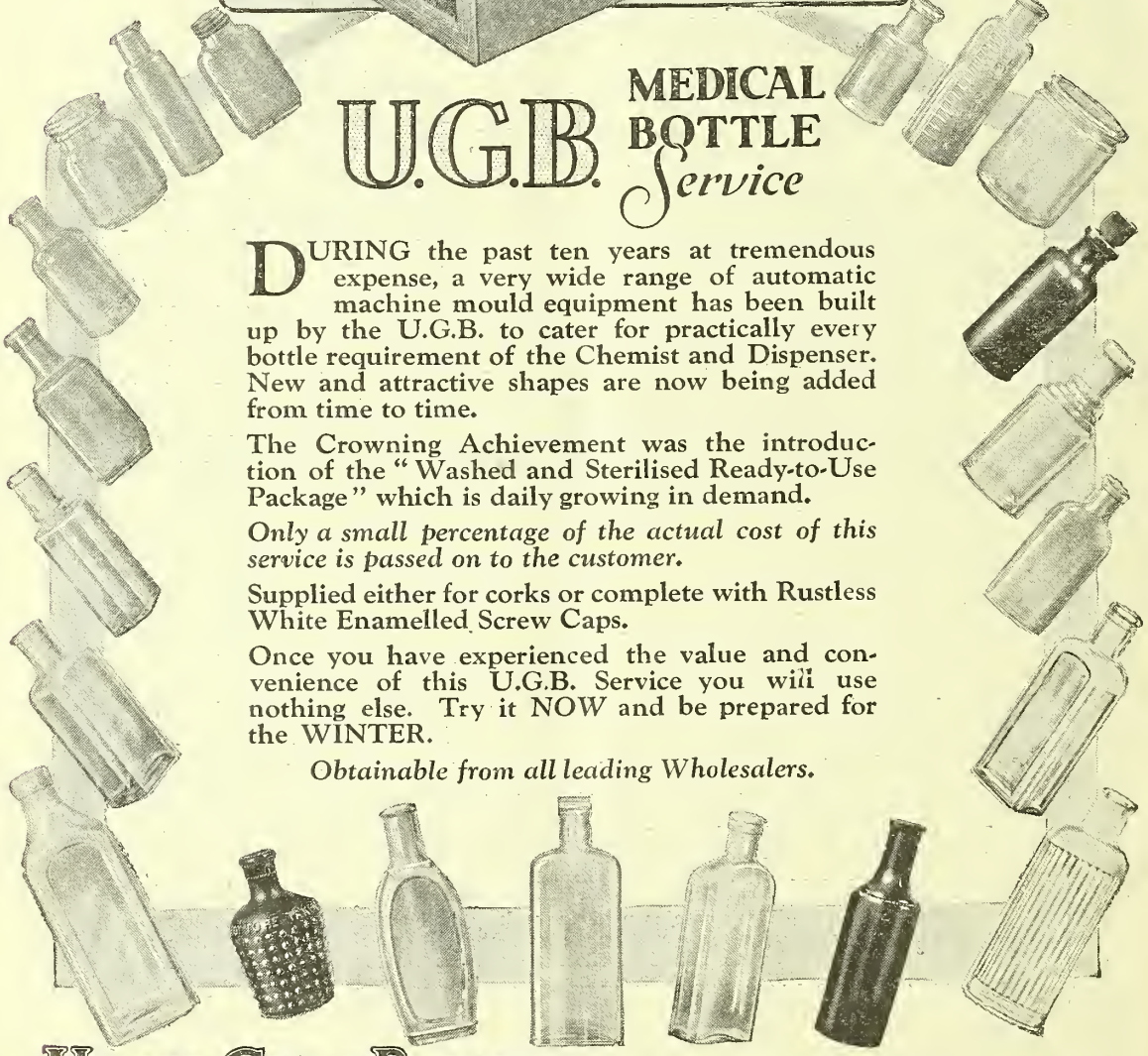
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[60/36]

THE CHEMIST AND DRUGGIST SUPPLEMENT

28 ESSEX ST.
LONDON, W.C.2

DECEMBER 27, 1930

This Supplement is inserted in every copy of The Chemist & Druggist.

THE CHEMIST AND DRUGGIST SUPPLEMENT

REVISED ADVERTISEMENT TARIFF.

Businesses Wanted and for Disposal, Premises to Let, Goods for Sale and Agencies—6/- for 50 words; every additional 10 words or less, 6d.

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PAYMENT.

All Advertisements are prepaid, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

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MUST REACH US NOT LATER THAN **FIRST POST THURSDAY MORNING.**

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take this opportunity to send their Greetings to their many Chemist friends, and to wish . . . them a Happy Christmas and a New Year of . . . Prosperity

Christmas 1930

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(1) YORKSHIRE—CHARMING SEASIDE TOWN.—Drug Store; established 18 years; average turnover, £1,150; living accommodation available; inclusive rental (without living accommodation) £31; no opposition; purchase price £700; owner retiring.

(2) DERBYSHIRE—SMALL TOWN.—Returns, £1,800; net profit £500; N.H.I. dispensing; inclusive rental £67; good living accommodation; owner retiring.

(3) LONDON, EAST.—Main business and branch for sale jointly; turnover of former, £2,200 per annum; good percentage net profits; living accommodation in each case; moderate rentals.

(4) YORKSHIRE—WEST RIDING.—Average turnover, £1,200; N.H.I. (approximately 2,100 scripts per annum); rent £54 on lease; good percentage; net profits; purchase price £650.

(5) DERBYSHIRE.—Branch business undeveloped; situated in healthy locality; turnover £700; net profits £200; inclusive rental £38; lease 12 years unexpired; purchase price £550.

(6) LONDON, S.E.—Drug Store; present turnover £700, with excellent scope for development; living accommodation; good class locality; purchase price £375.

(7) NORTHUMBERLAND.—Turnover, £1,380; rent £75; excellent opportunities for increase; purchase price £750, of which part could remain if desired.

(8) SOUTHERN IRELAND.—Seaside resort; turnover, £1,300; centrally situated; good living accommodation; purchase price, stock, and fixtures at valuation, plus agreed sum for goodwill.

(9) NORTH WALES.—Branch business; average turnover for last three years, £1,100; net profits £250; good living accommodation; purchase price to include agreed sum for goodwill; stock and fixtures at valuation (estimated at £400).

(10) ESSEX—NEAR LONDON.—Recently established; main road position; turnover £1,000, and increasing; no near opposition; good living; accommodation; purchase price £600 or near offer.

(11) LONDON, NORTH-WEST.—Old-established pharmacy with an approximate average turnover of £1,350; net profits £340; good living accommodation; main road position; purchase price approximately £1,400; considerable scope for increase under new management.

(12) LONDON, EAST.—Turnover, £1,200; N.H.I. (3,500 scripts per annum) in addition; living accommodation; purchase price approximately £650.

(13) LONDON, N.W.—Turnover £1,200; N.H.I. £50; present net rental £37 per annum.

(14) £275 OR NEAR OFFER—LONDON, N.W.—Drug Store with excellent possibilities; eminently suitable for single qualified gentleman; living accommodation on premises, if desired.

(15) COASTAL TOWN—SOUTH WEST.—Turnover, £1,700; net profits £400; inclusive rental £90; purchase price £925; situated in good class residential area.

(16) LONDON, E.—Present returns, £1,900 and increasing; good dispensing connection; including N.H.I.; rent £35, on long lease; purchase price £1,200.

(17) NEWCASTLE-ON-TYNE.—Genuine progressive business with an annually increasing turnover; present returns approximately £1,200; modernised house; purchase price, £500 to £600, according to stock valuation; residential district.

(18) SOUTH STAFFS.—Returns approximately £800; inclusive rental, £25 per annum; good N.H.I. and private dispensing; no opposition; price for quick sale £325.

(19) DERBY.—Opportunity for ambitious pharmacist to acquire well-situated business in residential area; present net profits approximately £4 weekly, but considerable opportunities exist for substantial all-round increase; living accommodation; no opposition.

(20) WILTSHIRE.—Old-established; present turnover, £1,400; good percentage net profit; N.H.I. and private dispensing; good living accommodation.

(21) LONDON, EAST.—Turnover, £1,550; N.H.I. (in addition) approximately 5,500 scripts per annum; rent £65; lease 21 years; purchase price £650.

(22) LONDON, NORTH.—Old-established; turnover £1,500; living accommodation; moderate rental on long lease; health reasons only for wishing to dispose.

(23) LANCASHIRE.—Returns, £1,250; N.H.I. dispersing (6,500 scripts per annum); rent £35; lease 15 years; no near opposition; purchase price, £800.

(24) WARWICKSHIRE TOWN.—Excellent family business doing £40 weekly; district rapidly extending; good living accommodation; ideal business for progressive man; Kodak agency; scope for optics; N.H.I. dispensing (350 scripts per month); rent of shop and house £104; rates £18; long lease; for immediate sale, price £1,000, goodwill and fixtures; stock at valuation; owner entering other business.

(25) BIRMINGHAM.—Drug Store, unopposed, with splendid prospects under qualified ownership; well situated in residential neighbourhood; good living accommodation; price for quick sale, £250; exceptional opportunity.

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8.—LONDON, S.W.—High-class Retail and Dispensing, with Kodak Agency; present returns about £35 weekly, increasing; good main road position; fine modern front; low rent; fully stocked; price £1,050, or £350 plus valuation.

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Printed for the Proprietors by THE AVENUE PRESS (L. UPCOTT GILL & SON, LTD.), 55 to 57 Drury Lane, W.C.2, and Published by the Proprietors, Morgan Brothers (Publishers), Ltd., at 28 Essex Street, Strand, London, W.C.2.—Dec. 27, 1930. [68/361]

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2 lbs.	2/3	18/-

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Printed for the Proprietors by The Avenue Press (T. Upcott Gill & Son, Ltd.). 55 to 57 Drury Lane, W.C.2, and Published by the Proprietors, Morgan Brothers (Publishers), Ltd., at 28 Essex Street, Strand, London, W.C.2.—December 27, 1930.